



# *Celebrating 20 Years of Progress*

Intercultural Cancer Council Presents

## 10<sup>th</sup> BIENNIAL SYMPOSIUM



ON MINORITIES, THE  
MEDICALLY UNDERSERVED  
& CANCER

*Committed to Eliminating Disparities...  
The Journey Continues*

Jointly Sponsored by  
Baylor College of Medicine  
Houston, Texas

**APRIL 19-23, 2006**  
Omni Shoreham Hotel • Washington, DC

**Abstracts, Scientific Oral Presentations,  
Student Presentations, CERP Workshops,  
and Survivor Workshops**

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# 10<sup>TH</sup> BIENNIAL SYMPOSIUM ON MINORITIES, THE MEDICALLY UNDERSERVED & CANCER

April 19 – 23, 2006 • OMNI Shoreham Hotel, Washington, DC

PRE-SYMPORIUM WORKSHOPS  
CERP WORKSHOPS  
SURVIVORSHIP WORKSHOPS

POSTER PRESENTATIONS - PROFESSIONAL & STUDENTS

ORAL PRESENTATIONS – STUDENTS & PROFESSIONAL

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**WEDNESDAY, APRIL 19, 2006**

**12:30pm - 4:15pm**      **Chairs:** Helen C. McCarthy, RN, MPA, OCN  
Rochelle Rollins, PhD

**I.      Grant Writing-Community Based**

Larry Laufman, EdD  
Baylor College of Medicine

The goal of this workshop is to give the participants an understanding of how community based grants are typically developed and presented for funding. Workshop participants will be given examples, tips, and tricks to hopefully make their grant writing experience less stressful and more successful.

**II.      Cultural Competency**

Patricia Matthews-Juarez, PhD  
Meharry Medical College

Evaon Wong-Kim, LCSW, MPH, PhD  
California State University, East Bay

Barbara Sapp Davis, RN, BSN, CNOR  
National Association for the Advancement of Colored People

Angel Rubio, MA  
Project Director-Community Base Research  
Appalachia Cancer Network

Daniel Bustillos, JD, PhD  
ICC Research Fellow  
Baylor College of Medicine

Dineo Khabele, MD  
Director, Gynecologic Oncology & Women's Cancer Research Laboratory  
Meharry Medical College

Culturally competent care is critical to effective cancer care. Expert panelists of social workers and cancer survivors will provide information to health professionals in building culturally competent communities of care. Participants will explore how our institutions and established processes affect the delivery of culturally competent cancer care in medical settings. Finally, the *Seven Collective Habits for Developing Effective Cultural Competence* will be discussed. This last session will summarize the comments and examples of the previous speakers by engaging the participants in a dialogue about some suggested "collective habits" we may want to encourage in our work.

**WEDNESDAY, APRIL 19, 2006 (CONTINUED)**

**III. Surviving: Long Term Effects of Cancer and Its Treatment**

Jody Pelusi, FNP, AOCN, PhD  
US Oncology

COL (Ret) James E. Williams, Jr., MS, SPHR  
Pennsylvania Cancer Coalition  
ICC Governing Board

This workshop explores issues faced by cancer survivors after their cancer treatments. Topics included: what happens when treatment is over, how to transition from treatment to being a long-term survivor, developing a follow up plan, incorporating wellness into your life, addressing family and work issues, and identifying resources and opportunities. It also reviews what is currently known regarding common latent side effects such as lymphedema, osteoporosis, cardiac/pulmonary changes, alterations in sexuality and body image, and second malignancies. Discussion regarding follow-up guidelines, symptom identification and possible prevention and management interventions will be included. Audience: cancer survivors and their families, health care professionals, researchers, policy makers, insurers, tumor registrars and pharmaceutical representatives. Everyone needs to be aware of potential long-term side effects and what can be done to eliminate, reduce or manage them if they occur.

**IV. Making Indigent Care Profitable**

Medicare/Medicaid Issues

Joe T. Porter  
Chairman of the Board  
Enterprise National Bank  
American Cancer Society

**Uncovering Eligibility Through Patient Advocacy**

Suzanne Pearlman  
Chamberlain Edmonds, Inc

**Medicare Prescription Drug Coverage**

David A. Chatel  
Acting Director of Patient Advocacy  
Centers for Medicare & Medicaid Services (CMS)

Amy Lerrick  
Lead Trainer, Division of Customer Service and Training  
Office of External Affairs  
Centers for Medicare & Medicaid Services (CMS)

David Chatel, Acting Director of Patient Advocacy at the Centers for Medicare & Medicaid Services, will provide a brief overview of CMS's outreach campaign around Medicare prescription drug coverage, including the important involvement of community-based organizations in this effort. Amy Lerrick, from the CMS Office of External Affairs, will then give an overview of the prescription drug coverage. Her presentation will include information on eligibility, enrollment, formularies, and factors a person should consider when deciding to choose and join a plan.

**WEDNESDAY, APRIL 19, 2006 (CONTINUED)**

**“Medicare Extra Help”**

Lydia Chevere  
Social Security Administration

**V. Patient Advocacy and Navigating the Healthcare System**

Nancy Davenport-Ennis  
President & CEO  
National Patient Advocate Foundation

Fran Castellow, MEd  
Chief Operating Officer  
National Patient Advocate Foundation

Molly Tanner, BS  
Marketing & Developing Coordinator  
National Patient Advocate Foundation

This workshop will help you discover ways in which you can make a remarkable difference in the lives of people in your community and in America by learning the skills necessary to navigate the path to effective patient advocacy. You will have the opportunity to influence healthcare legislation and educate your community as you develop the skills to become a voice for patients. Effective communication is key in treatment and in navigating the healthcare system. We will discuss, in practical dialogue, a number of challenging issues and the problems inherent to addressing them, as well as offering resources for well-informed decision making.

**VI. Grant Writing-Federal & Private Funding**

Diana Jeffery, PhD  
National Cancer Institutes

Lee Mann, PhD, JD,  
Scientific Review Administrator,  
National Institutes of Health

Scientific administrators from federal agencies will review government funding opportunities, including special funding programs for minority scientists. This session will cover grant mechanisms, the required components in grant applications, training and fellowship awards, the application process, peer review, and helpful resources. Participants will be encouraged to ask questions and/or contact the presenters regarding their research ideas and funding needs.

**WEDNESDAY, APRIL 19, 2006 (CONTINUED)**

**VII. Palliative Care and End of Life Issues**

Christine DeCourtney, MPA  
Alaska Native Tribal Health Consortium

Guadalupe Palos, PhD  
Department of Symptom Research  
UTMD Anderson Cancer Center

This workshop is designed to increase the culturally specific knowledge of nurses and health professionals who are working with the increasing numbers of a heterogeneous Hispanic/Latino and American Indian/Alaska Natives patient population. The program will provide key information and give nurses the tools to deliver effective, quality oncology care. The workshop will provide the knowledge needed to bridge the gap between nursing care and an ethnic population that is rapidly growing and our most northern native population in America.

**VIII. Cancer Clinical Trials: What do they mean for people in my community?**

Margo Michaels, MPH  
Education Network to Advance Cancer Clinical Trials (ENACCT)

Joy Workman, MSW  
Education Network to Advance Cancer Clinical Trials (ENACCT)

Felicia M. Solomon, MPH  
National Cancer Institute

*“Equal access to clinical trials is less a matter of scientific necessity than of social justice.”*

Experts continually recommend new community based approaches for clinical trial outreach and accrual, calling for “enhanced efforts at minority patient recruitment and retention to (cancer) clinical trials” and noting that “success (in clinical trials accrual) will require sustained, aggressive action, and new partnerships between policymakers, healthcare professionals, professional societies, and underserved communities.” In this interactive workshop, participants will explore the possibilities of engaging in clinical trial advocacy. By the end of this workshop participants will be able to:

- ✓ Distinguish myths from facts about clinical trials.
- ✓ Review why clinical trials may be important for people in one's own community
- ✓ Discuss how concepts of social justice may relate to clinical trial advocacy
- ✓ Identify barriers to enrolling in clinical trials, particularly for minority communities
- ✓ Identify ways to begin to overcome these barriers in one's own community
- ✓ List ways to use available clinical trial education materials in one's own community
- ✓ Develop a plan for conducting an educational outreach program in one's own community

**WEDNESDAY, APRIL 19, 2006 (CONTINUED)**

**IX. Advocacy for Change**

David Woodmansee  
American Cancer Society  
Government Relations

The workshop will inform local and state attendees on the use of advocacy in promoting The State Cancer Plans. The focus will be to make sure these cancer plans reflect the ICC Mission and Goals. We will train you on the how to and how not to bring our message to members of State Legislatures as well as members of Congress. Join us for some fun as well as skill building in advocacy.

**X. Obesity: Updates, Realities and a Toolkit for Addressing the Problem in Diverse Communities**

Beverly Gor, EdD, RD  
University of Texas  
M.D. Anderson Cancer Center  
Center for Research on Minority Health

Lindsay Rodgers, BA, RD, LD  
University of Texas at Austin

This workshop will present current information about the prevalence and impact of obesity on US populations, with special emphasis on racial and ethnic minorities and the medically underserved. Also, the presentation will include cultural perspectives on obesity, physical activity strategies, recommendations for addressing obesity in a culturally competent and effective manner. Examples of best practices and resources for practitioners to implement will be discussed

**XI. CancerPLANET**

Jon Kerner, PhD  
National Cancer Institute

In this interactive, computer-based training, participants will learn to navigate the Cancer Control PLANET (Plan, Link Act, Network with Evidence-based Tools) Web portal in order to bridge the research discovery-program delivery gap and increase the adoption of evidence-based approaches in comprehensive cancer control planning, implementation and evaluation.

(This 3 1/2 hour workshop is tentatively scheduled to take place at the **National Institute of Health campus**. Participants will meet at the OMNI Shoreham Hotel Lobby at **11:30am** and travel by Metro to the NIH campus. Participation for this workshop is limited to 30 individuals.)

**CANCER EDUCATION RESOURCE PROGRAM WORKSHOPS**

4:45 PM - 5:45 PM

PALLADIAN ROOM

**Moderator: Guadalupe Palos, RN, LSMW, DrPH**

**Through the Lens of Culture: Cross Cultural Comparison of Similarities and Differences in End of Life Care**

Presenters:

Sharon R. Latson, Senior Director of Access Initiatives, VITAS Health Care Corp  
Gwendolyn London, D. Min, Director, DC Pain Initiative London & Associates

Julio Arce, MDiv-Chaplain for VITAS Innovative Hospice, Miami, FL

Jaikoo Lee, MDiv-Chaplain for VITAS Innovative Hospice Care, Philadelphia, PA

The Workshop will teach principles of diversity and cross cultural comparison in end of life care from an Asian, Latino and African American perspectives. The group of experts will lead participants in discussions concerning barriers to care, advance care planning, hospice care, spirituality and cultural traditions and preferences as it relate to end-of-life care.

4:45 PM – 5:45 PM

EMPIRE BALLROOM

**Moderator: Patricia Matthews-Juarez, PhD**

**Literacy and Urban Issues: To Reach Men, Women and Disable Populations, through Culturally Sensitive Approaches and Peer Educators**

Presenters:

Joyce Dolbec, MA

This presentation provides an overview of the design, development and implementation of the YWCA of NORTHERN Rhode Island "Sister to Sister Peer Education Program," a community based awareness program breaking down barriers to literacy, sociocultural, education, prevention , access and screenings issues using the 4 E's concerning cancer and their health.

Obj 1 Key components of a successful collaboration - build, maintain and duplicate.

Obj 2: Give overview of structure, operational model and tools- for hearing and non-hearing community.

Obj 3: Inform participants of successes and development of cancer task force.

**THURSDAY, APRIL 20, 2006 (CONTINUED)**

4:45 PM – 5:45 PM

CAPITAL ROOM

**Moderator: Carlos Gallego, MEd**

**Dos Amigos: Prostate Screening Information DVD for Hispanic/Latino Men**

Presenters:

Kathleen Scura, EdD, RN

Neddie Serra, EdD, RN

This pilot study explored Hispanic men's reaction to a nurse-directed presentation on information on prostate cancer and prostate cancer screening. This nurse-directed program assumes that Hispanic/Latino men are most comfortable with visually presented information in the Spanish language with sensitivity to their cultural values. Men's beliefs about prostate cancer and prostate cancer screening, their fears about the screening process also influence screening behavior. Both men's belief regarding the risk posed by prostate cancer and the efficacy of prostate screening are associated with greater willingness to participate in prostate screening.

4:45 PM – 5:45 PM

BLUE ROOM

**Moderator: Frankie Powell, PhD**

**For the Glory of God: Establishing Health Ministries in the African American Community**

Presenters:

Rita C. Gondocs, MPH

This workshop will indicate how health promotion can be established and sustained in the African-American faith community. This research study is grounded in community based participatory research theory. The African-American population in the US has the highest mortality rate of any racial and ethnic group for all cancers combined and for most major cancers.

**Healthy Spirits**

Presenters:

Katora P. Campbell, MPH

Marian A. Robinson, MSN

The purpose of Healthy Spirits is to give churches the opportunity to establish positive working relationships with congregations as well as community partners to improve the understanding and healthy choices for their church members thus reducing health disparities.

**THURSDAY, APRIL 20, 2006 (CONTINUED)**

4:45 PM – 5:45 PM

AMBASSADOR BALLROOM

**Moderator: Bonnie Wheatley, MPH, MA, EdD**

**The James/*link* A tool to Assess Cancer Risk in Your Community**

Presenters:

Kevin Sweet, MS, CGC

Kimberly Kelly, PhD, MS

The purpose of this workshop is to educate participants on the purpose and functions of the James/*link* tool; to demonstrate its utility in diverse populations, including a performance assessment by screen reading programs.

4:45 PM – 5:45 PM

GOVERNOR'S ROOM

**Moderator: COL Ret. James E. Williams, Jr. MS, SPHR**

**State Comprehensive Cancer Control Plan: A Community Approach Texas Cancer Control Tool Kit: Bringing the Texas Cancer Plan to Communities**

Presenters:

Carla Strom, MLA

Juanita Salinas

A Coalition subcommittee developed the Texas Cancer control Toolkit, which can be used by communities seeking to increase their local cancer control efforts. This workshop will introduce participants to the Toolkit's purpose and contents. Upon completion of the workshop participants will be able to:

1. Apply the tools provided in the Texas Cancer Control Toolkit to implement the *Texas Cancer Plan* by developing and improving local cancer prevention and control programs.
2. Identify and invite key community members to the table.

4:45 PM – 5:45 PM

EXECUTIVE ROOM

**Moderator: Sandral Hullett, MD, MPH**

**Community-based Research Education in Eastern Kentucky (CREEK): A Program to Build the Capacity of Rural Communities to Conduct Health Research for the Control and Prevention of Cancer and Chronic Disease in a Health Disparity Population**

Presenters:

Gilbert H. Friedell, MD

Angel Rubio, MA

The intent of the workshop is to discuss "grow our own" research personnel from rural communities, based on our belief that community residents with research skills are in a position to tap their contextual knowledge to conduct high-quality community-based research.

3:00 PM – 4:30 PM

DIPLOMAT ROOM

**Moderator: Ermilo Barrera Jr., MD****Patient Navigator and Clinical Trials Matching Program**

Presenters:

Angelina Esparza, RN

Ted Gansler, MD

Adrienne White, MPA, CHES

The goal of the workshop is to deliver timely information and available programs; promote informed decision making; and enhance the quality of life for American Cancer Society constituents undergoing cancer treatment by the optimal utilization of ACS services and programs. The ACS Patient Navigator Program is one component of a broader navigation system offered by the American Cancer Society. The ACS Patient Navigator Program involves the placement of trained ACS staff in strategically selected healthcare facilities with oncology treatment services. Host healthcare facilities will be carefully selected, based on outlined criteria to maximize organizational collaboration and outreach efforts to the medically underserved. This workshop will discuss the partnering of both ACS programs and its outcome.

3:00 PM – 4:30 PM

EMPIRE BALLROOM

**Moderator: Veronica Chollette, RN, MS****Colorectal Cancer Program, National Cancer Institute**

Presenters:

Roshan Bastani, PhD

Bang Nguyen, DrPH

Mark Dignan, PhD

Sarah Fox, PhD

Carrie Klabunde, PhD

The American Cancer Society recommends that men and women 50 or more years of age have an annual fecal Occult blood test (FOBT) and a flexible sigmoidoscopy (FS) examination every five years to screen for colorectal Cancer (CRC). Alternative CRC screening regimens that are recommended include having a barium enema X-ray (BE) at five-year intervals or a colonoscopy (CX) every 10 years. Compliance with CRC screening guidelines is low. The study, Increasing Colon Cancer Screening in Primary Care, is intended to develop and test methods that may be used to increase CRC screening compliance. This presentation will discuss the results of this study in different populations.

**FRIDAY, APRIL 21, 2006 (CONTINUED)**

3:00 PM – 4:30 PM

CAPITAL ROOM

**Moderator: Cheryl Kidd, MPH**

**Race, Ethnicity and Beyond**

Presenters:

Angelicia Bunch, BA, JD

Mary Lou Adams, PhD, RN, CS, FNP

Selma Morris, MEd

Bonnie Wheatley, MPH, MA, EdD

Margaret and Elizabeth Stothart

For more than 20 years, the Susan G. Komen Breast Cancer Foundation and its network of Affiliates have funded programs to support our mission of eradicating breast cancer as a life threatening disease. Screening, treatment and education programs are identified via a Community Profile, which is conducted by the Affiliate biannually within their respective service areas. This session is a dynamic learning opportunity that provides ways to reach out to and connect with the many different people who live in your community.

3:00 PM – 4:30 PM

GOVERNOR'S ROOM

**Moderator: Venus Gines, MPA**

**Investing in Capacity-Building for Community-Based Organizations**

Presenters:

Andy Miller, MHSE, CHES

Claire Neal, MPH, CHES

Community organizations across the country are mobilizing to address the needs of the 10 million cancer survivors in the United States today. The Lance Armstrong Foundation is committed to providing capacity-building for community-centered organizations that serve the physical, emotional, and practical needs of cancer survivors. This interactive session will explore the major challenges for community-centered organizations and discuss how these challenges can best be met through collaborative, coordinated efforts to build capacity at the local level.

3:00 PM – 4:30 PM

Room to be announced

**Moderator: Captain Lauren Tancona, BSN**

**Comprehensive Cancer Control in Indian Country, CDC**

Presenters:

Sara Zeigler, MPA

Charlton Wilson, MD

Pattie M. King, LPN

Judith Muller

This session will include a discussion on how sovereignty makes AI/AN different from other minorities. It is this special relationship that complicates the healthcare systems for AI/AN.

**FRIDAY, APRIL 21, 2006 (CONTINUED)**

4:45 PM – 5:45 PM

BLUE ROOM

**Moderator: Selma Morris, MEd**

**Health Literacy, Patient Education and Specialized Medical Care**

Presenter:

Martha Burton Santibanez

Jessica Beckwith

The National Marrow Donor Program's Office of Patient Advocacy (OPA) developed an audio compact disc and supplemental workbook to address language and health literacy needs for patients considering unrelated blood stem cell transplant as a treatment option. "Best practices" in producing low-literacy patient education resources were identified and incorporated into the project. Feedback suggests this resource meets a critical literacy need and provides a model for developing accessible patient education materials for other medical specialties.

4:45 PM – 5:45 PM

CAPITOL ROOM

**Moderator: Betty Lee Hawks, MA**

**Jade Ribbon Campaign: A culturally Targeted Global Intervention to Address the High Prevalence of Hepatitis B among Asians and Asian American. Testing Vaccinating Asian Americans for Hepatitis B in a Non-Medical setting: 3 for Life project**

Presenter:

Eric R. Sue, BS

In this workshop, we will educate participants about the disproportionately high incidence of HBV and liver cancer in the Asian community. Participants will learn about what the Asian Liver Center (ALC) and its Jade Ribbon Campaign have done to address these issues both nationally and internationally. We will provide an ALC model on how to perform outreach and education for various target groups (i.e. youth, health care providers, general public).

**FRIDAY, APRIL 21, 2006 (CONTINUED)**

4:45 PM – 5:45 PM

EMPIRE BALLROOM

**Moderator: Sharon Barrett**

**Seeking Cecums: A Faith Based Initiative to eliminate barriers to Colon Cancer Screening**

Presenter:

Stephen C. Lloyd, MD, PhD

We aim to reduce barriers to screening in our community and therefore reduce the disparity in colorectal cancer death rates for African Americans. We have a highly structured training program, which has produced 17 African American graduates who perform screening colonoscopies. The training is coupled with an aggressive community outreach program incorporating Federal Health Centers and faith based initiatives. Further dissemination of this model could address both the capacity and demand of the disparities issue.

4:45 PM – 5:45 PM

DIPLOMAT BALLROOM

**Moderator: JoAnn U. Tsark, MPH**

**A WEB-Based Approach to providing Cancer Education Materials in Asian and Pacific Islander Languages**

Presenter:

Reginald C.S. Ho, MD

This workshop will describe the process by which we identified the needs and how we addressed the problems encountered in putting together the resource portal. Physicians, nurses, social workers, and other caregivers have had difficulty obtaining education materials in Asian and Pacific Island languages for patients and families who have limited proficiency in English. We became aware that a number of organizations have developed such materials on their websites and we developed a web resource portal that would provide links to the organizations that have these materials on their websites. This portal would identify and catalog a selection of such materials present on the web and make them easily accessible to caregivers who can then print out these materials for their patients or clients as needed.

4:45 PM – 6:15 PM

Room to be announced

**Focus Group-ICC National Network**

Presenters:

Pamela M. Jackson, MS

Gilbert Friedell, MD

This workshop is for the ICC National Network 15 Leaders.

**THURSDAY, APRIL 20, 2006**

11:00 AM – 12:30 PM CLINICAL TRIALS CONGRESSIONAL A

**Moderator: Mary Lou Adams, PhD**

**“Clinical trials in Your Local Communities”**

Presenters:

Elda Railey

Mary Lou Smith

Research Advocacy Network

11:00 AM – 11:45 AM Part I CANCER 101 CONGRESSIONAL B

**Moderator: Doris Browne, MD, MPH (Col. Ret.)**

**A Basic Understanding of Cell Development and How Cancer Grows**

Presenters:

Diana Jeffrey, PhD

Carol L. MacLeod, PhD

National Cancer Institute

11:45 AM – 12:30 AM Part II HOME REMEDIES CONGRESSIONAL B

**Moderator: Doris Browne, MD, MPH (Col. Ret.)**

**What's in Your Medicine Cabinet? A Discussion about Complementary and Alternative Medicine and Cancer**

Presenter:

Mary A. Chesney, PhD

National Center for Complementary and Alternative Medicine

**FRIDAY, APRIL 21, 2006**

9:00 AM – 10:45 AM

CONGRESSIONAL A

**Moderator: James Hadley**

**How to Start Your Own Support Group**

Presenters:

Bobbi de Cordova Hanks  
Lisa Harjo, MPH  
Pattie M. King, LPN  
Eugene Wheeler  
Ming-Der Chang, PhD  
Nancy Liao  
Ivis Febus-Sampayo  
Mary Jackson Scroggins

**Cancer Educational Resource Program “Examining Cancer Interventions in 2006”**

3:00 PM – 4:30 PM

BLUE ROOM

**Moderator: Pamela K. Brown, MPA**

**Addressing Health Disparities: NCI/CIS Resources at Work**

Presenters:

Mary Anne Bright, Director

James Rarick  
Cancer Information Service  
Cancer Research Center of Hawaii (CRCH)

This workshop will detail the new resources available to the public through this nationwide cancer information and referral service. This service is available in all 50 states and Puerto Rico, and receives more than 2,000 calls each day.

4:45 PM – 5:30 PM

GOVERNOR'S ROOM

**Moderator: Yvette Colón, MSW, ACSW, BCD**

**What is Pain Management? What role does the survivor play in managing pain?**

Presenters:

Mary Bennett, MFA  
Pamela Bennett, RN, BSN  
Linda Burhabsstipanov, MSPH, DrPH, CHES  
Yvette Colón, MSW, ACSW, BCD

## PROFESSIONAL POSTERS

**#01**

### **Awakening Choices: Colon Health, Our Stories**

*Melany Cueva*

Colorectal cancer is the second leading cause of cancer mortality among Alaska Native people. The incidence rate of colorectal cancer for Alaska Native women is twice that of any other ethnic group in the U.S. During focus groups, people shared important colorectal messages which were woven into the 26 minute movie, Awakening Choices: Colon Health, Our Stories. The movie features Alaska Native people sharing their stories of health, cancer, and hope. Colon screening and common concerns are discussed. Rose, a Yupik dollmaker and Community Health Practitioner from Chevak, Alaska brings life to legends, through a deep well of imagination and humor. Her Yupik dolls, symbols of the old ones, guide our artistic movie journey showing us ways to keep our bodies strong and our communities healthy.

Inspired, motivated, comfortable, relieved, encouraged, hopeful, aware, and educated were words expressed in response to watching the movie. Select evaluation comments included, "I felt a part of the people in the movie-same fears, same relief;" "I want to go out and get colon screening now;" "I am important. I want to see my children's children;" "Take Care of yourself. If you don't you can't take care of others."

To extend learning an accompanying 40-page activity guide, answers common questions and provides ways to involve community including a Bingo activity, penny game and Readers' Theatre. Our presentation will highlight the movie and the process of making a movie rich in the culture and beauty of Alaska and its people from focus group, through script development, and post editing evaluations.

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**#02**

### **The Effect of a Lay Health Advisor Intervention on Cervical Cancer Knowledge and Attitudes among Apsáalooke Reservation**

*Allison Leigh Gidley, Suzanne Christopher, Alma Knows His Gun McCormick, Bethany Letiecq, Adina Smith*

The project Messengers for Health on the Apsáalooke Reservation uses lay health advisors (LHAs) to circulate information and generate knowledge about cervical cancer prevention to members of the community in a culturally competent manner. Northern Plains Native American women, of whom the Apsáalooke are a part, are disproportionately affected by cervical cancer. The project Messengers for Health uses a community-based participatory research (CBPR) approach where community members and university employees work in partnership on all aspects of the project. Current literature shows that LHA interventions have been effective in rural, underserved, and minority communities, including Native American Communities. This study is unique because it uses LHAs as part of a CBPR approach to address cervical cancer awareness and prevention on a Native American Reservation. This presentation will share results of statistical tests that examined changes in knowledge and attitudes pre- and post-intervention. A one group pre- and post-test design was used to examine changes. We used the Apsáalooke Reservation's tribal roll to randomly select women for pre- and post-intervention interviews. The tribal membership included over 10,000 people in 1996. In 2002, 101 Apsáalooke women participated in pre-test interviews, and in 2005, 83 of the original women were interviewed a second time. There were mixed results on the knowledge items in the interviews from the pre-test to post-test. Certain questions pertaining to cervical cancer knowledge levels showed a statistically significant increase from pre-test to post-test. There were no statistically significant changes seen in some questions where a high pre-test knowledge level existed. Specific information on the findings will be presented, as well as the limitations and implications of these findings.

## #03

### **Traditional Food Dietary Guide for Alaska Native Cancer Survivors**

*Jennifer S Johnson, Christine A DeCourtney, Karen Mitchell*

**Background:** Maintaining a healthy diet is critical to cancer survivors. During treatment and survivorship, food recommendations can be foreign and unfamiliar to Alaska Natives (AN) who rely on traditional foods obtained through subsistence activities. For Alaska Natives battling cancer, subsistence foods are a source of strength. In 2005, the Lance Armstrong Foundation provided a two-year grant to the Alaska Native Tribal Health Consortium to develop culturally appropriate nutrition materials for Alaska Native cancer survivors.

**Rationale:** At a time when comfort foods are most needed, there are no tools that discuss using traditional plants and animals to substitute for recommended foods which may be unfamiliar, unavailable or unaffordable in geographically isolated Alaska communities. There are no guidelines to assist cancer survivors maintain a nutritious diet with traditional subsistence foods.

**Purpose of study:** Develop materials for AN cancer survivors to substitute healthy, available, and nutritious traditional Native foods into dietary regimens during and after cancer treatment.

**Methods:** Nutritional data will be compiled into a user friendly guidebook and educational display for cancer survivors, to assist them in maintaining good nutritional standards during and after treatment. The project will rely heavily on information gathered elders from key AN groups (Yupik Eskimo, Inupiat Eskimo, Tlingit/Haidas, and Athabascan) from throughout the state who are knowledgeable about traditional foods.

**Results:** The guidebook will be provided to cancer survivors. The educational display will be rotated throughout Alaska. This project provides tools that AN cancer survivors can use to incorporate traditional foods into their diet. It can be used as a model for other ethnic groups who wish to integrate healthy traditional foods into their cancer survivorship diet.

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## #04

### **Delivery of cancer screening services in rural and remote communities.**

*Judith Muller*

Alaska Natives are diagnosed with colorectal cancer at twice the rate of other populations. Data gathered in Alaska in 2004 for the Indian Health Service (IHS) shows that only 19 percent of Alaska Natives over 50 years underwent sigmoidoscopy in the previous 5 years or colonoscopy in the past 10 years compared to 45 percent in all Alaskans and almost 50 percent in US Whites.

Colorectal cancer screening resources are not readily available outside of Alaska's larger communities. Problems include the high demand on health care providers for acute care services; flexible sigmoidoscopy and colonoscopy are generally performed by physicians and specialists, who are only available at the tertiary care center in Anchorage and only intermittently at regional hub facilities; and the high cost and problematic nature of travel in rural Alaska where only a few communities are linked to the road system.

When there is difficulty in building capacity, as in rural Alaska, a dilemma is created between the desire to increase the demand for services by educating the population, and the desire to be able to provide all of the services that are needed. The question arises as to whether resources are better spent on building capacity or on increasing public knowledge on the importance of cancer screening.

Creative measures including mass screenings and transportable equipment can be used to meet the demand, but a great deal of planning, integration of resources, collaboration among providers and public health agencies is needed to assure that the screenings occur as needed.

**#05**

**Native Youth Olympics: An opportunity for prevention education**  
*Lakota Ree Murray*

According to the Harvard Report on Cancer Prevention, 72 percent of cancers are linked to preventable risk factors including tobacco, diet, sedentary lifestyle and alcohol use. Addressing and educating individuals about these preventable risk factors are important steps in cancer prevention. Since 2003, the Alaska Native Tribal Health Consortium and the Health Promotion/Disease Prevention program have provided sponsorship for the statewide Junior Native Youth Olympic and Native Youth Olympic events. We recognized these events as opportunities to provide prevention messages and education related to nutrition, physical activity and tobacco, all subsections of the Alaska Tribal Health System's Cancer Plan prevention section. By building on our existing organizational and community partnerships around traditional youth activities, we have increased the number of learning opportunities for cancer prevention messages to be included in these events that have a statewide reach. This poster will showcase the ways in which we incorporated prevention messages related to cancer and education into these annual, traditional and youth focused events.

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**#06**

**"I May Speak Out Because I Have to Now": California Indian Cancer Survivor Self-Advocacy Approaches**

*Diane Elizabeth Weiner, Christine R Gibson-Romero, Debra Wingard, Christine R Gibson-Romero*

**Background:** Indians interviewed in California about cancer behaviors state that they often wait until pain prevents the person from performing daily chores before seeking detection and treatment services (Weiner 1996-2003). Physical pain associated with cancer tended to be treated by clinicians or endured. Once diagnosed, Indians suffer from limited palliative care resources.

**Rationale:** California IHS contract clinics offer limited cancer screening and no oncology services. Existing pain and palliative care programs target the general population, rather than Natives. Purpose of Study: The California NARCH team investigated Native perspectives of pain management and palliative care with the goal of developing a culturally competent curriculum for lay and professional audiences. A crucial task was to assess the variables that impact perceptions about pain and palliative care.

**Methods:** The communities included the rural, suburban, and urban communities of one county, whose Native population includes about 25,000 individuals. We conducted group interviews with three groups of lay people and one group of CHRs and Public Health Outreach workers. A total of 17 individuals participated. Additionally, ten cancer survivors or their companions were interviewed in-depth about cancer and palliative care. Data was assessed using methods based on grounded theory coding.

**Results:** As part of this larger topic, participants often described the methods they or their companions used to attempt to alleviate pain and discomfort. Interactions with providers and family caregivers reveal distinct avenues used by survivors to maneuver health systems and attempt to attain empowerment. **Implications:** This pilot project outlines the ways individuals learn to become self-advocates. It also explicates the challenges to obtain care. Data can be applied to develop advocacy programs for Native cancer survivors, or survivors at large.

#07

### **In Mommy's Garden: A Book to Help Explain Cancer to Young Children**

*Written by: Neyal J. Ammary, MPH, CHES Illustrated by: Christopher Risch*

*In Mommy's Garden* is a 32 page picture book that can be used to educate young children on the concept of cancer. It is geared toward children ages 3 to 7 years old who have a parent or loved one with cancer, but can also be used with older children, adults of all ages, and people with low literacy levels. The text in the book is simple and the sentences are short. The characters in the illustrations were created with multicultural skin tones and without faces so that the book does not single out any racial/ethnic group and can be used by anyone whose life is affected by cancer. It was evaluated with cancer survivors and children before it was published in order to assess its usefulness as an educational tool, its comprehensibility with children, and its cultural appropriateness. *In Mommy's Garden* has been used by families, healthcare professionals, hospitals, teachers, churches, daycares and others to give people the words to talk about cancer with children, especially when they are unsure of what to say or how much information to give. In 2004, it won an award from the American Public Health Association for the best public health education and health promotion print material, as well as a Silver Award from the National Health Information Awards Program. The book is available in English and Spanish and can be found online at <http://books.canyonbeach.com/inmommysgarden>.

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#08

### **Social/family functioning and functional wellbeing among a diverse sample of breast cancer survivors**

*Kimlin T Ashing-Giwa, Judith S Tejero*

**Background/Rationale:** Breast cancer survivors (BCS) face physical and psychosocial issues that impact functional wellbeing. Studies report that non-White BCS were more likely to have decreased functional abilities, and report low energy, sleep disruption, and concerns about pain. However, population-based studies addressing these functional concerns are lacking, as is information regarding predictors of functional wellbeing, particularly the role of social factors.

**Purpose:** To examine functional wellbeing and its predictors among a population-based, multiethnic sample of BCS.

**Theoretical Framework:** Ashing-Giwa's Contextual Model of Health-Related Quality of Life, an approach which expands the traditional HRQoL framework to include cultural and socioecological contexts, provided the theoretical foundation.

**Methods:** 703 BCS (19% African-, 29% Asian-, 26% Latina- and 25% European- American) were recruited from the California Cancer Registry and Los Angeles area hospital registries between January 2001 and June 2003. Functional wellbeing was defined as the ability to perform normal activities. Predictor and mediating variables were ethnicity, age, income, type of surgery, level of pain, and social/family wellbeing. Descriptive, bivariate, ANOVA, and step-wise multiple regression analyses were conducted.

**Results:** Mean functional wellbeing scores were 71.6 for African-, 75.3 for Asian-, 66.3 for Latina- and 72.4 for European-Americans. Latinas reported more adverse pain, and the lowest social/family and functional wellbeing ( $p<0.001$ ). Pain ( $r=0.50$ ) and social/family wellbeing ( $r=0.58$ ) were correlated with functional wellbeing. The model explained 46.7% of the variance in functional wellbeing. After controlling for income and social/family wellbeing, ethnicity was no longer a significant predictor; significant predictors were level of pain, income, and social/family wellbeing.

**Conclusion/Implications:** Functional wellbeing is predicted by income and pain and mediated by social/family well-being. Studies on functional wellbeing should address physical and socio-cultural dimensions.

**Acknowledgement:** Research supported by a grant from the Department of Defense, Breast Cancer Research Program #17-99-1-9106

#09

**NCI's Community Clinic at Upper Cardozo/Shaw**

*Michelle Bennett, Suzanne Marie Heurtin-Roberts, Melissa Bronez, Caryn Steakley, Lee Helman, Martin Gutierrez*

Minority and underserved populations have historically been underrepresented in cancer clinical trials. Access to clinical trials has been identified as a barrier to receiving cutting-edge cancer treatment and services. The National Cancer Institute's Center for Cancer Research, with the support of the institute's Office of the Director, has established a community based clinic in the context of an existing primary care clinic in the Upper Cardozo/Shaw neighborhood, Washington, DC. The NCI component of the clinic provides cancer screening, evaluation, consultation, and facilitates enrollment into clinical treatment protocols of the largely Hispanic and African American community. The initiative's main objectives include partnering with the community to bring excellent cancer care to the area, provide education about cancer and clinical trials, to provide equal access to clinical care, treatment and research, and to increase minority representation in cancer research. An ethnographic analysis of clinic activities to date in the context of the community is being conducted including queries of clinic staff, leadership, patients and community members. Preliminary results from this analysis, current issues and future plans will be discussed.

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#10

**A Collaborative Approach to Reducing Health Disparities**

*Virginia A Bradford, Pamela J Cooper*

**Objectives:** After a decade of operation, the Partnership in Cancer Control has had a profound impact on the health and well being of Louisville/Jefferson County. Primary objectives (1) increase breast cancer screening among women, targeting specific populations who are low income, uninsured, African American, and non- English speaking. (2) Educate hard to reach women utilizing innovative and culturally competent interventions. (3) Remove barriers related to low screening rates. (4) Decrease morbidity and mortality rates through early detection and screening.

**Methods:** Efforts focus on development of innovative educational outreach programs, which include mobile mammography. Careful review of data and scientific literature identifies critical need for community partnerships to successfully recruit women to the program. Implementation of culturally appropriate strategies for education, screening, treatment, and patient navigation for minority, low income, and non - English speaking women is a priority.

**Results:** The Partnership has been effective in increasing the number of women being screened. These screening services are complimented by community based educational programs in order to recruit eligible women. Barriers such as lack of knowledge, fear, accessibility, and cost have been eradicated due to the success of this program. The Partnership continues to grow. Today nearly 4000 women are screened each year. Approximately 50% are eligible to receive mammograms at no cost. Evaluation accumulations over a five-year period have shown the need and effectiveness of this program. 98.2% of participants indicated they planned to have a mammogram again the following year. Participants understand the importance of annual screening and have come to recognize the quality of care it represents as well as the life saving potential of the program. We are bridging the gap and transforming knowledge into action through the Partnership in Cancer Control.

## #11

### Trends in Cervical Cancer Screening in an Inner City Community Outreach Program

*Carol L Brown, Diana Godfrey, Mary L Gernignani, Winsome L Grant*

**Methods:** Retrospective review of a database of 98,378 patient visits to the Breast Examination Center of Harlem from 1994 to 2004. In this outreach program, 16.6 % of the patients had Medicaid, 9.9% Medicare, 13.9% commercial insurance, and 59.5% had no coverage/ self-pay. Sixty-five percent of the patients were 40-60 years of age.

**Results:** During this time period, 37,577 Pap tests and 1,174 colposcopy examinations were performed. Fifty-five invasive cervical cancers were diagnosed. The program had an average of 3,104 new visits per year, and 5,839 follow-up visits per year. In the first half of the study period (1994-1999), 36 cancers were detected in 502 women undergoing colposcopy (7.2%); i.e. 36 cancers in 16,534 Pap tests (0.2%). During the second half of the study period (2000-2004), 19 cancers were detected in 671 women undergoing colposcopy (2.8%); 19 cancers in 22,423 Pap tests (.08%). More than half of all cervical cancers were diagnosed in the first three years of the program (1994-1997): thirty-three cancers were diagnosed in 224 (14.7%) women undergoing colposcopy. This represented 33 cancers in 8,298 (0.4%) Pap tests. Conclusion: The initial high incidence of cervical cancer detection in this outreach program represents prevalent cases in an under screened community. Over the 10 year study period, the screening program has been successfully integrated into the community, with a resulting significant decrease in incidence of invasive cervical cancers detected.

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## #12

### Colonoscopy Completion Rates for Colorectal Cancer Screening and Early Detection among Low-Income and Uninsured African Americans, Asian Americans and Latinos in Montgomery County, MD – Results of a Two Year Study

*Irene Dankwa Buadoo, Charlene Holt, Richard C Taylor, FlorDeMaria L Gutierrez, Katty M Joseph*

**Background:** Colorectal cancer is the 3rd most commonly diagnosed cancer and the second leading cause of cancer deaths in the US. Disparities exist in survival rates among minority and medically underserved populations. Colorectal cancer screening despite its benefits has remained low. Low screening rates below Healthy People 2010 goals suggests that interventions are needed to increase screening rates.

**Rationale:** Montgomery County Cancer Crusade was established in 2000 to address cancer disparities and provide access to screening and early detection. The program works in partnership with medical providers, five community hospitals, and community-based organizations. Although the program has been successful in recruiting efforts, participation by minorities and completion of colonoscopy screenings is low. This study attempted to identify interventions leading to completion of colonoscopy screenings among three different minority groups.

**Methods:** Five community hospitals, three minority health initiatives (African American, Asian and Latino) primary care providers and clinics serving low-income and uninsured populations implemented education and referral programs. Core program components were media campaigns, community outreach, free colonoscopy screenings for eligible participants, patient navigation, and case management. Results: Study showed 854 low-income and uninsured participants who identified themselves as African American, Asian or Latino entered the colonoscopy screening program. 389 completed the colonoscopy screening. Completion rates were highest among referrals from primary care clinics for all three population groups (63-68%); Among the Latino population rates of completion was highest among participants that were referred from a culturally tailored health promoter model (72%); Rates were lowest among African Americans (6%); A culturally tailored Asian outreach program was successful in providing referrals and completing colonoscopy screenings (46%); Overall colonoscopy screening completion rates were African Americans (36.3%), Asian Americans (43.9%) and Latinos (57.5%);

**Implications:** Primary care providers are effective in influencing decisions to screen for colorectal cancer and subsequently completion of colonoscopy screenings. Lay health promoter model increases the use of colonoscopy screenings by Latinos. Culturally tailored interventions may be effective in increasing colonoscopy screenings among Asians. Research examining social and behavioral factors that will influence colonoscopy screening by African Americans is needed.

**#13**

**Improving Cancer Screening Among Low Income Women: a Randomized Controlled Trial in Community Health Centers**

*Andrea Cassells, Allen J. Dietrich, Christina M. Robinson, Mary Ann Greene, Michael Beach, Carol Sox, Jonathan N. Tobin, Richard G. Younge*

**Background/Rationale:** Low-income women receive fewer indicated cancer screening tests than those with higher incomes.

**Purpose:** Evaluate an intervention to increase cancer screening. Theoretical Approach: Randomized controlled trial and analysis on an intent-to-treat basis.

**Methods:** Sample - Selection: 11 Community/Migrant Health Centers (C/MHCs) in New York City that are part of Clinical Directors Network (CDN), a Practice-Based Research Network. Patients: 1413 women aged 50-69, recruited during primary care visits. Intervention: Patients assigned to the intervention received telephone support calls (mean=4) from Prevention Care Managers (PCMs). The calls assessed patient barriers to screening, provided education, and assisted with access to services.

Measures: Mammography and Pap test within the past 18 months; colorectal cancer screening at intervals suggested by the United States Preventive Services Task Force; number of screening services up-to-date.

**Results:** Between baseline and follow-up, all three services increased significantly more for the intervention group compared with the usual care group. For the intervention group, mammography was 0.1 higher (a 17% increase), Pap was 0.07 higher (a 10% increase) and colorectal cancer screening was 0.24 higher (greater than a 60% increase). The proportion of patients up to date for all three services increased by 0.22 (a 120% increase). Of those assigned to the intervention, 9% were never successfully reached. Implications: PCMs can improve cancer screening up-to-date status for C/MHC patients. Next steps are to enhance the intervention to provide outreach to women who seldom visit C/MHCs for primary care and to disseminate the intervention to settings where it can be sustained such as managed care organizations, health plans and large medical groups. Supported by NCI R01-CA87776 and supplements.

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**#14**

**Fecal Occult Blood Testing Educational Video**

*Moon Chen*

The California Dialogue on Cancer (CDOC) is a statewide partnership of cancer control leaders. CDOC's Disparities Team is charged with implementing strategies to reduce cancer health disparities.

Each year in the United States, more than 145,000 people are diagnosed with colon cancer and nearly 57,000 die from the disease. Colon cancer affects men and women regardless of race or ethnicity, and is more common among people age 50 and older. Detected early, colon cancer can be treated and cured.

While colon cancer screening tests, such as colonoscopy and sigmoidoscopy, are costly, requiring clinicians to perform uncomfortable, invasive procedures, a Fecal Occult Blood Test (FOBT) is an accessible procedure that can screen significant numbers of people at minimal expense. It is often the first option for uninsured and underinsured individuals. The purpose for developing a video is to provide visual instruction access more populations.

FOBT can be daunting for low literacy and limited English proficient (LEP) individuals. In an effort to lessen the unease in performing FOBT while increasing screening compliance, CDOC's Disparities Team, in conjunction with the Asian American Network for Cancer Awareness Research and Training, has developed culturally-tailored, language-specific videos designed to assist LEP individuals successfully complete perform FOBT. Videos are currently available in Spanish, Mandarin, and Vietnamese, with an English-version video, culturally-tailored for African Americans is currently under development. It will be closed captioned for the hearing impaired.

The videos are being pilot tested in community clinics in San Francisco and Sacramento, California. Patients will view the appropriate video in a private room following discussion with a healthcare who will address the importance of colon cancer screenings, introduce the FOBT, and answer any patient questions. Patients will be asked to provide feedback for final revisions.

**#15****Ethnic differences in dietary intakes and body weight measures: NHANES 1999-2000.**

*Susan S Cho, Victor Fulgoni, Donna Thede, Celeste A Clark*

We compared dietary intakes and body weight measures in Mexican-Americans, African American and white women participating in the fourth National Health and Nutrition Examination Survey (NHANES), 1999-2000. Dietary records (24 hour recall) and body weight measures were gathered from interviews with U.S. adult females aged over 19. African Americans had significantly higher mean BMI and waist circumference (WC) values than other ethnic groups (BMI; 31.6 in African Americans vs. 28.7 in Mexican

Americans vs. Non-Hispanic Whites 27.6: WC; 98.2 cm vs. 91.9 cm vs. 91.5 cm). There were no observed ethnic differences in intakes of fat or energy among 3 ethnic groups. However, African Americans had consumed foods which had significantly higher energy densities and their fiber intake levels were significantly lower than other ethnic groups. Our data also showed that a higher percentage of African Americans skipped breakfast. Although reported total energy and total fat intakes did not differ significantly between groups, there were significant ethnic differences in intakes of fiber, energy density and breakfast pattern that may have implications for the etiology of obesity.

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**#16****The California Prostate Cancer Coalition: Evolution through Advocacy**

*Sarah Elizabeth Connor, Westley Sholes, Stan Mikkelsen, Sarah Elizabeth Connor, Laura Baybridge, Merel Grey Nissenberg, Andrew Reske*

This presentation describes the results of two years of advocacy efforts by the California Prostate Cancer Coalition (CPCC) to ensure the continuation of the IMPACT Program (Improving Access, Counseling and Treatment for Californians with Prostate Cancer), a statewide program that provides free prostate cancer treatment to low-income, uninsured or underinsured men. In January 2004, the California Department of Health Services began the process of closing the IMPACT Program due to the state's fiscal crisis. As leading prostate cancer advocates in California, the CPCC stepped in and initiated a series of grassroots strategies to save the Program. We will examine the achievement of short-term outcomes such as maintaining IMPACT Program funding, increased policymaker awareness of the issues surrounding access of low-income, vulnerable populations to prostate cancer treatment, and achievement of key policy outcomes. Building a broad based community coalition, the CPCC has continued these advocacy and education activities efforts over the past two years and continue to this day. These activities will be examined, effects on state policy and on the CPCC will be reviewed, and future implications will be discussed.

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**#17****Understanding Racial Disparities in Colorectal Cancer Screening Practices: Behavioral Risk Factor Surveillance Survey (BRFSS), 2002 and 2004**

*Natalie Danielle Crawford, Lisa Richardson*

**Introduction:** Colorectal cancer (CRC) screening reduces CRC incidence and mortality. Disparities exist in CRC mortality among underserved populations. We examined the impact of reported racism on endoscopy or fecal occult blood test (FOBT) use.

**Methods:** Our sample included whites, blacks and Hispanic men and women over 50 responding to "the reactions to race" module on the 2002 and 2004 BRFSS. Logistic regression examined the strength of associations between perceptions of racism: how often one thinks about race (race cognition), emotional and physical symptoms and mistreatment seeking health care and receipt of endoscopy (colonoscopy/sigmoidoscopy, n=30,210) within 5 years or FOBT within 2 years (n=9,460).

## #17 (continued)

**Results:** After appropriate weighting, 45.2% of whites reported endoscopy compared to 40.7% of blacks and 32.1% of Hispanics ( $p<0.05$ ). Thirty-four percent of whites reported FOBT, compared to 30.6% of blacks and 15.3% of Hispanics ( $p<0.05$ ). Univariate models revealed high race cognition was associated with lower endoscopy use ( $OR=0.73 (0.57-0.92)$ ) and FOBT use ( $OR=0.47(0.38-0.58)$ ) compared to low race cognition. Other racism measures were insignificant. Multivariate logistic regression models revealed receipt of endoscopy and FOBT were associated with age, Hispanic ethnicity, smoking status, education and income, health insurance, and having usual source of care (USC). High race cognition was associated with lower FOBT use ( $OR=0.65 (0.52-0.82)$ ) in the multivariate analysis.

**Implications:** Perceived racism, measured as race cognition, appears to affect CRC screening with FOBT. Increasing the use of CRC screening will require changing health care systems and provider attitudes to build trust among populations who have been traditionally underserved.

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## #18

### **Perceived Racial Discrimination and Non-adherence to Screening Mammography Guidelines: Results from the Race Differences in the Screening Mammography Study**

*Amy Beth Dailey, Stanislav V Kasl, Beth A Jones*

**Objective:** The objective of this study was to determine if perceived racial discrimination influenced non-adherence to screening mammography guidelines.

**Methods:** Data for this analysis were derived from a prospective study, "Race Differences in Screening Mammography Process." 1,451 African American and White women ages 40-79 years who obtained an index screening mammogram at one of five urban hospitals in Connecticut between October 1996 and January 1998 were enrolled. 1,229 women completed both a baseline telephone interview follow-up interview. The outcome was non-adherence to age-specific screening mammography guidelines, as set forth by the American Cancer Society. The participants were asked whether they had ever experienced discrimination, because of their race or color, in any of the following situations: at school, getting a job, at work, at home, getting medical care, on the street/public setting, or from the police/courts.

**Results:** Approximately 42% of the African American respondents reported racial discrimination in their lifetime, compared to approximately 10% of White women. Perceived racial discrimination was not associated with non-adherence to screening mammography guidelines in unadjusted bivariate calculations or multivariate models.

**Conclusion:** Although past experiences of racial discrimination were not uncommon in this population, results from this study do not support the hypothesis that perceived racial discrimination is associated with non-adherence to screening mammography guidelines. Unlike some aspects of care in which patients are less involved in decision-making (e.g., surgical procedures), health prevention behavior reflects both access to care and patient adherence. It may be that those who recognize and experience racial discrimination develop compensatory characteristics that enable positive health prevention behavior, such as adherence to mammography screening guidelines.

#19

## Introducing the Appalachia Community Cancer Network (ACCN)

*Mark B Dignan*

Appalachian populations have elevated incidence and mortality rates for a variety of cancers. The cancer health disparities in Appalachia are associated with a wide variety of factors, including poverty, rural isolation, and limited access to health care. The Appalachia Community Cancer Network (ACCN), funded in 2005 by the National Cancer Institute's Center to Reduce Cancer Health Disparities, is addressing disparities through a five-year program of research, training and educational activities in a seven state region of Appalachia. These activities focus on cervical, lung, and colorectal cancers, the primary contributors to the cancer health disparities in Appalachia. Research will be multidimensional, but will emphasize development and evaluation of effective interventions to increase cancer screening and reduce cancer health disparities. In addition, pilot research studies will be conducted by junior and new investigators. ACCN training will focus on developing and expanding cancer prevention and control expertise among new investigators and clinicians with a special interest in research among rural, underserved populations. Research on cancer epidemiology, behavioral science, tobacco control, and health policy is anticipated. ACCN education will emphasize educational activities with community members and local health care providers to increase awareness of and participation in screening and early detection services, clinical trials, and smoking cessation programs. In the long term, it is anticipated that the wide array of ACCN research, training and educational activities will reduce contributing factors to cancer health disparities in Appalachian communities. It is also anticipated that effective cancer control interventions developed in Appalachia through ACCN community-based research will be transferable to other rural, underserved populations.

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#20

## The Role of Nutrition Epidemiology in Reducing Cancer Health Disparities

*Nancy J. Emenaker, Virginia W Hartmuller, Appasaheb R (Joe) Patel*

Socioeconomic status (SES) is more strongly associated with the risk of developing and surviving cancer than either racial or ethnic difference, population differences across dietary consumption patterns may contribute cancer health disparities. Since dietary influences are a modifiable lifestyle factor of SES, we investigated the role of nutrition epidemiology in reducing cancer health disparities. We searched the Program Module Administration database for NCI grants administered by EGRP. Grants awarded from 1983 to 2005 and internally coded as health disparities (#1381) and either nutritional epidemiology (#1850) or diet/nutrition (#1713) research projects were included in our analyses. Using these criteria, 43 nutrition epidemiology projects investigating a diverse range of cancers in 9 distinct racial/ethnic groups were funded. When comparing funding mechanisms for health disparity nutritional epidemiologic research, 71% were supported by the R01 funding mechanism while 23% were supported by R03's. The R01 mechanism supported the greatest diversity investigating 9 distinct racial/ethnic population groups. While R03's and R37's each investigated health issues in 5 racial/ethnic groups, slightly fewer racial/ethnic groups were investigated by either P01 or U01 mechanisms. These nutrition epidemiology awards spanned 18 distinct cancer tissue types with women comprising the largest percentage of study participants. Although investigators were highly responsive to submitting applications in response to funding opportunity announcements, continuing applications were more successful than new applications. Overall, our findings suggest NCI supports a diverse span of cancer research in racially and ethnically diverse populations stressing the inclusion of women participants. These awards predominately focused on studies of antioxidants/phytoestrogens, general dietary components and energy balance however a minor emphasis included vitamin D, folate, overall SES, and dietary acculturation issues. In conclusion, our findings suggest the need for greater emphasis on issues of food choices, SES, and acculturation to reduce the cancer risk and mortality in these underserved populations.

## #21

### Colorectal Cancer Brochure Development using Focus Group Methodology with African Americans *Kim L. Freeman, Katherine N DuHamel, Lina Jandorf*

**Background:** African Americans (AAs) are more likely to get and die from colorectal cancer (CRC) than any other racial or ethnic group in the USA. Yet, AAs are less likely to undergo screening than their White counterparts despite evidence that many deaths could be prevented through screening.

**Rationale:** Traditional interventions may not be effective in increasing CRC screening because they are not sensitive to the diverse levels of motivation, depths of knowledge or differences in cultural values of those targeted for intervention.

**Purpose of study:** Use focus group methodology to refine previously developed educational materials that target average risk AAs over the age of 51. Six brochures to promote CRC screening among AAs were tested and compared to standard materials from the CDC.

**Theoretical Approach:** The study uses the Trans-theoretical Model (TTM) supplemented by factors from the Precaution Adoption Process Model (PAPM) and the Health Belief Model (HBM).

**Methods:** Two series of focus groups were completed, with a total of seven groups and 39 participants. The focus groups were held in Harlem, NY between January and May 2005. The purpose of the first series (Set 1) (N=21) was to refine previously developed educational brochures and obtain feedback regarding content, layout, and color. The second series (Set 2) (N=18) was conducted to gather further feedback and confirm the suggested changes made after Set 1.

**Results:** All participants believed in the efficacy of CRC screening and thought that the brochures motivated them to talk with their doctors about screening. Cost, pain, and fear were identified as major barriers to screening in Set 1 and were verified in Set 2. The brochures were modified to address these issues. Medical mistrust or distrust of the healthcare system and/or health professionals was also identified as a barrier.

**Implications:** Educational brochures that target minorities and address their major concerns could improve awareness of CRC and CRC screening. Focus group methodology with this target population can be used to inform educational interventions.

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## #22

### Community-based Research Education in Eastern Kentucky (CREEK): A Program to Build the Capacity of Rural Communities to Conduct Health Research for the Control and Prevention of Cancer and Chronic Disease in a Health Disparity Population

*Gibert H. Friedell*

The Community-based Research Education in Eastern Kentucky (CREEK) program fosters the education of research workers in the control of cancer and other chronic diseases. Because achieving and maintaining good health in rural, underserved communities is a societal, and not just a medical concern, emphasis is placed on the behavioral and social sciences.

Sociology, anthropology, psychology, and social work are among the disciplines which students are encouraged to pursue. A career development ladder from community college through graduate school has been established, with academic, research, community and professional mentoring available at each rung on the ladder. The program is operated by a consortium of community colleges, regional universities and the University of Kentucky.

## #22 (continued)

The intent of the program is to "grow our own" research personnel from rural communities, based on our belief that community residents with research skills are in a position to tap their contextual knowledge to conduct high-quality community-based research. Working with members of the community, CREEK students focus on identification of community problems.

They address issues related to the prevention, detection, diagnosis and treatment of cancer, as well as cancer survivorship and the quality of care along the cancer continuum. This approach also serves as a model for dealing with behavioral aspects of other chronic diseases important in eastern Kentucky including diabetes, hypertension, heart disease and asthma.

A distinctive feature of the first year program is an integrative seminar with three topical modules in each 16-week semester. Each module focuses on subjects important to the pursuit of community-focused research. The modules include health issues, Appalachian social structure, qualitative research, population science, community-based participatory research, and public policy. Mentors help to assure that each student gains the maximum benefit from the program. The intent is to give students an overview of critical community health issues and methodological approaches to these issues, and to gain the interest of the students in following a research path as they progress toward their educational goals.

The CREEK program is designed to be an adjunct to, and an enhancement of, the defined curricula in their disciplinary studies. As students continue in the CREEK program a second distinctive feature is their involvement in community-based participatory research in every year of the program. As the program grows, a third feature will be the development of teams of undergraduate and graduate students from all levels in the program who will address selected common issues.

Scholarship aid is sought for those at the community college, baccalaureate, and graduate school levels. Mentors are drawn from departments in the University, from participating community colleges and regional universities, and from the involved communities. Advisory groups from involved communities, as well as from academia, plus selected national consultants, will maintain focus within the program.

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## #23

### **Knowledge and Attitudes of Prostate Cancer Awareness, Education, and Early Detection Among Underserved African American Men in the Houston/Harris County Communities: The M. D. Anderson Cancer Center Prostate Outreach Project Experience**

*Jacqueline Denise Frost, Xuemei Wang, Lancelot L Jones, Pamela Roberson, Demetris A Green, Curtis A Pettaway, Cassandra L Harris*

Participants completed a modified version of the Prostate Knowledge and Attitude Questionnaire ([Ashford AR, et al. Cancer 91:164-172, 2001](#)) before and after watching the educational video *Listen Up!* (Texas Cancer Council and Texas Southern University Cancer Education Center, 1993). The questionnaire includes a total of 16 questions related to participants' knowledge, attitudes, and beliefs about prostate cancer. McNemar's test was carried out to evaluate the significance in change of response between pre- and post-video watching. Wilcoxon signed-rank test was performed to test the significance in "composite score" changes post- versus pre-video watching. P-values less than 0.05 were deemed as statistically significant. Participants' answers had a significant change post-video watching for question 7 (A man is more likely to develop prostate cancer if his father had it. P-value =0.0006), question 8 (Men older than age 65 years are more likely to develop prostate cancer. P-value =0.0008) and question 9 (Approximately 1 in every 6 men will develop prostate cancer in his lifetime. P-value =0.003). And there was a marginally significant change for question 10 (African-American men are at higher risk than whites to get prostate cancer. P-value =0.07). Defining success as moving up one category (such as from "agree somewhat" to "agree strongly") in participant's response post-video watching, the success rates for questions 7 through 10 were 325/411 (79.1%), 367/414(88.6%), 345/414 (83.3%) and 354/397 (89.2%) respectively. Implications: Having adequate knowledge in these areas is a significant determinant of screening behavior and potentially a mechanism to reduce prostate cancer mortality among African Americans.

**#24****Race as a Factor in Clinical Trial Participation among Breast Cancer Patients***Denise C Fyffe, Diane R Brown, Michael S Simon*

Clinical trials are mechanisms for testing new therapies and provide opportunities for women with breast cancer to be exposed to state-of-the-art treatments and therapies. However, only a small number of women who are eligible for clinical trial participation actually enroll (Johansen et al., 1991; Bennett, 1993). While accrual in clinical trials is generally low, it is especially low for minority women. As a result of poor accrual, there is a need to provide scientific evidence to determine efficacy of various therapies for diverse segments of the breast cancer population. The investigation examined patient factors that impact the participation in clinical trials of African American and Caucasian women with breast cancer. This cross-sectional study recruited women within eight weeks of a new diagnosis of breast cancer. Data were collected using the Patient Treatment Decision Questionnaire, Clinical Trial Enrollment Report and chart reviews. Of the 195 women interviewed, 31.3% were African American; 67.2% were Caucasian and the remaining 1.5% were Latino and Arab American. Findings indicated differences by race in predisposing, enabling, need and help seeking factors that determine if women enter clinical trials. For example, when compared to Caucasian women African American women were less likely to: a) have health insurance ( $p=0.00$ ); b) be familiar with the term "clinical trial" ( $p=0.00$ ); c) have physicians or oncologists talked to them about participating in a clinical trial ( $p=0.00$ ); and d) to belong to a breast cancer support group ( $p<.01$ ). These findings indicate a number of factors that deter minority women and limit their decision to participate in clinical trials. These barriers may serve as targets for interventions to improve physician communication and educational efforts for this underserved population.

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**#25****Functional Health Literacy in Spanish among Latinas seeking Breast Cancer Screening in the NCCCEDP Program***Samantha Garbers, Karen Schmitt, Ann Marie Rappa, Mary Ann Chiasson*

**Background** While efforts have focused on encouraging women to initially seek breast and cervical cancer screening, few programs have examined the barriers to completing the screening continuum and follow-up. Functional health literacy may be a key predictor of whether a woman obtains complete and appropriate breast and cervical cancer screening.

**Methods** A collaborative research project is recruiting 800 Black and Latina women attending appointments for cancer screening at two NCCCEDP sites in New York City, administering a survey questionnaire, and measuring functional health literacy with TOFHLA/TOFHLA-S. Survey data are combined with clinical follow-up data.

**Results** Since October 2005, 142 Spanish-speaking Latinas (age 40-75) have been enrolled in the study. Almost all (97%) were foreign-born, and half had less than a high school degree. Half had marginal or inadequate health literacy in Spanish. Women without adequate functional health literacy were significantly more likely to agree with statements associated with external locus of control: "I think staying healthy is a matter of luck more than anything else" ( $OR=3.28, 95\% CI: 1.55-6.94$ ) and "I leave it to my doctor to make the right decisions about my health" ( $OR=5.64, 95\% CI: 1.61-19.76$ ).

**Conclusions** More than half of the Latinas we studied will have difficulty interpreting medical materials, even in Spanish. Screening providers need to be aware that using written materials may not be an effective way to communicate follow-up needs for patients. These data suggest that women with low health literacy have different attitudes related to locus of control, which may influence screening and follow-up behaviors. The study will continue to examine the course of follow-up for patients with inadequate and marginal health literacy in Spanish, controlling for case management.

## **#26**

### **Health Promotion/Disease Prevention in a Community Mental Health Setting**

*Kelly Gardiner, Denise Cianek, Dr. Carmen McIntyre*

Community Network Services which provides Community Mental Healthcare in Oakland County, Michigan has embarked on an innovative and holistic program to ensure that our consumers have optimal medical healthcare.

It was determined that our clients have higher risk factors for various diseases simply because they have mental illness. Research supports a 4 time increase in diabetes whether or not a consumer takes psychotropic medications. In addition, many of the medications that consumers need in order to function, increase risk factors for cardiovascular disease, diabetes, metabolic syndrome, and obesity to name a few.

Due to the mental illness, it is difficult for our clients to maintain and obtain quality healthcare. Add on the fact that many are poor, homeless, of minority status, illiterate, lack insurance or are underinsured, and have difficulty functioning in society and you have the makings of people that "fall through the cracks" of our medical system of care.

The Medically Fragile Team will address severe medical problems by linking consumers with various community agencies for assistance, educating consumers on illness and disease prevention, driving consumers to appointments, and acting as liaisons between medical providers and our psychiatrists. Continuity of care will save money by avoiding duplication of services, decreasing the risk of disease via early treatment and/or diagnosis, decreased inappropriate use of the emergency room, and decreased hospitalizations. It is hoped that being physically healthy will also impact the mental well-being of our consumers.

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## **#27**

### **Applying the Transtheoretical Model to Project Pink Crusade, Jefferson County, Arkansas**

*Valandra L German*

Like the overall United States population, the site with the second highest cancer mortality rate for African American women is the breast. The breast cancer mortality rate in Arkansas for African American women is higher than the breast cancer mortality rate for the nation. The biggest unmet need for African American women is early recognition of the disease. In 2004, only 13.27% of African American women who were eligible for BreastCare enrollment in Jefferson County, AR were actually enrolled. While African American women in Arkansas have initial access to breast-related services through BreastCare, Arkansas' breast and cervical cancer early detection program, there is evidence that compared to other ethnic groups African American women were not utilizing the program to the same extent.

Project Pink Crusade (June 2004-June 2005) was developed to provide empowering, timely, relevant, and culturally competent health education to African American women who were 40 years of age and older who resided in Jefferson County to raise awareness in regard to breast and cervical cancer and the BreastCare program and its services. Project Pink Crusade addressed health disparities among this population, and ultimately aimed to increase the quality of life for the uninsured, underserved, and underinsured African American women of Jefferson County by decreasing morbidity and mortality rates of breast and cervical cancer. The educational and outreach programs were based upon the Transtheoretical Model and were strategically designed to be implemented in various capacities including faith based organizations, community centers, and beauty salons.

## #28

### Predictors for Patient Attrition from Randomized Control Trials (RCTs)

Caroline Antoinette Greenidge, German F Alvarado, Barbara A Given, Charles W Given

**Background** The RCT is frequently plagued by attrition, and reports of attrition findings often vary. 1 We lack a standard attrition definition and we propose extending a previous operational definition of attrition.

**Hypothesis-I.** We propose two post-randomization attrition groups subjects who die and subjects who are lost to follow-up or withdraw from the RCT. II. We will describe predictors for attrition from a RCT. III. We anticipate differing predictors for the two attrition groups.

**Methods** – We conducted a secondary analysis of a completed behavioral intervention RCT using multinomial (polytomous) logistic regression to examine the impact of multiple covariates on study retention versus attrition and death. Prior to randomization, 10 refused to participate, 1 died, and 124 subjects participated, with 62 randomized to each arm, experimental and control.

**Results** – We found a significant association between attrition and intervention group (OR 3.6, CI 1.0, 12.3; p-value 0.046) and attrition and Veteran Health Administration (VHA) group (or 9.5, CI 1.9, 48.6; p-value 0.007). Patient mean symptom severity score was significantly associated with death (OR 3.6, CI 1.0, 12.3; p-value 0.046). Patient ethnicity appeared to be a strong predictor for both attrition (OR 2.9, CI 0.4, 20.9; p-value 0.3) and death (OR 2.7, CI 0.4, 17.9; p-value 0.3) but lacked statistical significance.

**Conclusions** Patient intervention group, symptom severity mean score and VHA group have significantly differing association with clinical trial attrition and death. Consistent delineation of predictors for attrition from RCTs may lead to a better understanding of attrition bias and possible solutions.

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## #29

### Analysis of Intra-Ethnic Differences in Cancer Prevention

Barbara Ann Hastie, Henrietta L Logan, Scott Tomar

**Background & Purpose:** Cancer screenings and preventive care for minorities have increased, given the heightened awareness of the alarming inequalities in detection, treatment, and prognosis of cancer although little is known about within-minority differences in prevention efforts. This study sought to illuminate intra-ethnic variations related to access, attitudes, and barriers to cancer screenings in 5 Latino groups.

**Sample & Statement Of Methods:** 892 (34% male) individuals of Hispanic descent comprised the sample of intra-ethnic groups: Cuban (CU, 46.3%), Puerto Rican (PR, 7.7%), Nicaraguan (NI, 16.9%), Colombian (CO, 14%) and other Latinos (OL, 15%). Mean age was 44 years with 99.8% speaking English, and 93.5% reporting their race as "white."

**Results:** ANOVA and chi-square analyses were performed. Results revealed no differences between groups on being told they had cancer or were at risk. Significant intra-ethnic differences were found in those who reported immediate family members having cancer ( $p < .05$ ), CU the highest and NI the lowest; those who are concerned about getting cancer, CU the highest, NI the lowest; those who were concerned about getting cancer, CU least concerned (16.8%), PR the most concerned (27.5%); and those who feel they are at risk with PR & CU feeling most at risk & CO reporting little risk ( $p < .001$ ). Those who felt least at risk were the most willing to seek screening ( $p < .0001$ ). Those stating they felt least at risk were the most willing to participate in screenings (CO & NI,  $p < .0001$ ). Except for CU, all groups would be more inclined to seek screening if doctors and family encouraged ( $p < .001$ ). Additional intra-ethnic differences were family history of cancer, symptoms, confidentiality ( $p < .05$ ) but no difference in trust of doctors or healthcare system.

**Conclusion:** These findings highlight important intra-ethnic differences unique to each group including family history, role of doctors, perceived risk and concerns which do not seem to be explained by acculturation or access issues. The trend has been to produce uniform educational programs and messages for minority groups without consideration of intra-ethnic variations. This study demonstrates the need for tailored messages to address the needs and concerns of different Latino groups.

Supported by ACS Grant #ROG022301.

## #30

### Complementary Medicine Trends of Latinos in Cancer Preventive Care

Barbara Ann Hastie, Henrietta L Logan, Scott Tomar

**Background:** Complementary medicine (CM) in cancer prevention is a nascent field of research and little is known about preferences among minorities. What propels individuals to seek alternative medicine is also an undiscovered science. This study sought to identify trends of CM choices among a large Latino sample to provide insight into what CM practices relate to preventive care and beliefs about cancer.

**Methods:** From a sample of 892, 130 individuals (69% female, mean age 42 years) of Latino descent indicated they used CM within the previous 12 months. Survey assessment included multiple dimensions about fears, beliefs and prevention related to cancer, the Perceived Stress Scale and the LADDR. Chi-square and ANOVA evaluated group differences between CM users versus non-users (NCM).

**Results:** 57.7% sought nutritional advice and pursued lifestyle dietary changes as preventive health measures; 79% reported their doctors provided such guidance; other modalities: 30% massage, 26.9% herbal remedies; 25.4% spiritual healing/prayer; 23.1% meditation/imagery/relaxation techniques, 12.8% homeopathy, 10.1% traditional Chinese, Ayurvedic or American Indian; 7% biofeedback; hypnosis 3.1%. Compared to the NCM, the CM group reported on average approximately twice the frequency of having cancer or perceived cancer symptoms and seeking healthcare for them, being *told* they were at risk, concern about getting cancer, willingness to participate in and doctors recommending screenings ( $p < .05$ ). There were no differences in *feelings* of risk, fear of cancer diagnosis, income, education, access to care or insurance coverage ( $p < .05$ ). There were no gender differences within the CM group on screening trends, the LADDR or PSS.

**Conclusion:** Reasons for engaging in complementary medicine are as little understood as the treatments themselves. These findings suggest that the reasons for Latinos pursuing CM may not be socioeconomic, insurance, or gender differences; influences seem to be related to present symptoms, having cancer, risk or concerns about getting cancer. Individuals pursuing CM appear to be proactive to pursue preventive care as evidenced in their willingness to participate in cancer screenings and the propensity to make necessary lifestyle alterations to thwart disease risk. Communities and doctors have an important role to play in supporting prevention efforts including screenings and CM

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## #31

### Human Subject Protection Training for Community workers on an Appalachian Cervical Cancer prevention project

Jennifer Hatcher, Katie Morris

Obtaining human subjects' protection training has become an integral part of research conduct. Most training efforts are excessively burdensome for non academic staff, requiring knowledge of detailed information about IRB review, scientific misconduct, and financial conflicts of interest. The Appalachian Cervical Cancer Prevention project, which draws on local community assets to promote the use of Pap tests in rural, underserved Appalachian counties, is a community based project that involves lay interviewers. As the primary contacts for potential participants in the research study, the interviewers must understand informed consent and how to protect research participants' privacy and confidentiality. We sought to develop a human subjects training module more in line with the specific content these community based workers are likely to encounter. We developed a training module written in lay terms and containing only information pertinent to the non key personnel and their role in this project. The objectives of the training module are to: • Identify the three fundamental ethical principles that guide the ethical conduct of research involving human participants. • Define privacy and confidentiality as it applies to protecting human participants and describe how these can be maintained throughout the research process. • Define informed consent. • Define conditions under which informed consent may be withdrawn.

In addition, we designed a straightforward test to evaluate the interviewers knowledge of the content presented. This test uses a case study design, simple language and contains fifteen questions.

This human subjects training is currently being used in the Appalachian Cervical Cancer Prevention project.

## #32

### Factors influencing obesity in Asian-Americans

*Maria A. Hernández-Valero, Taylor Tran, Beverly Gor, TruongSon V. Hoang, Mike S. Hernández, Richard A. Hajek, Michelle A. Detry, Lovell A. Jones*

In the United States (US), obesity continues to impact the health of individuals across gender, age, and race/ethnicities, since it is strongly associated with hypertension, hypercholesterolemia, coronary heart disease, diabetes and cancer. Very little has been studied to examine obesity in the Asian-American community, which could be partially due to obesity not being considered a risk factor for poor health outcomes among Asian-Americans, as it is in the Caucasian, African-American, or Hispanic populations.

**Methods** The Asian-American Needs Assessment (AsANA) was conducted to examine the health status, risk behaviors, and use of clinical preventive services among Chinese and Vietnamese adults in southeast Texas. The data were weighted according to the 2000 US census results and adjusted for household size. We examined the association between adult ( $\geq 18$ y) obesity and the daily consumption of 5 or more servings of fruits and vegetables while adjusting for age, gender, and ethnicity. We compared the percent of obesity (body mass index  $\geq 25$ ) across sociodemographic characteristics: age, gender, and ethnicity. Logistic regression was used to examine the relationship between obesity and diet independently, and multivariate logistic regression was used to examine the relationship when adjusting for age, gender, and ethnicity.

**Results** On the univariate model, those who reported consuming 5 or more servings of fruits and vegetables per day were 14% less likely ( $OR=0.86$ , CI 0.51, 1.45) to be obese; however, the only statistically significant result showed that females were 60% less likely than males ( $OR=0.40$ , CI 0.25, 0.64) to be obese. In the multivariate model, only gender remained statistically significant ( $OR=0.41$ , CI 0.54, 1.81).

**Conclusion** For the Asian-American population in our study, gender seemed to be a more important factor contributing to obesity than sociocultural or behavioral factors.

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## #33

### Pain experience and management in the Chinese and Vietnamese population in Houston, TX

*TruongSon V Hoang, Beverly J Gor, Mike Hernandez, Lovell Jones, Angelina Esparza, Hsin-Hsing Hsieh*

There is limited data on pain prevalence, experience and management in the Asian American community. Cultural and linguistic factors may have contributed to the underreporting and inadequate management of pain symptoms in this population. The goals of this study were to 1) examine pain etiology in the Chinese and Vietnamese population in Houston, Texas, 2) identify pain management strategies and pain descriptors used in this population, and 3) identify access barriers to pain management.

A secondary analysis of the Asian American Health Needs Assessment (AsANA) examined various pain constructs using a sample of 814 randomly selected respondents (404 Chinese, 409 Vietnamese) from four counties in the Greater Houston area. The AsANA survey instrument was adapted from a BRFSS-like questionnaire to be culturally and linguistically appropriate for the study population. Telephone interviewers asked respondents to identify causes of pain, pain intensity, pain management strategies, and pain communication issues. Descriptive statistics were used to answer the research questions.

Data from the Chinese population alone showed that 34.9% of the respondents had experienced frequent and chronic pain. The most frequent causes of pain include headaches, back problems, arthritis and rheumatism. Chinese respondents manage pain symptoms using passive approaches (resting, sleeping), in addition to using prescription drugs and alternative treatments. Language was identified as the primary barrier (33.2%) to accessing pain-related healthcare, followed by inability to see a doctor (26%) and lack of health insurance (19.3%). Pain data for the Vietnamese population is being analyzed and will be presented at the conference.

The data suggested the need for improved pain control, use of a medical translator, and greater access to the healthcare system.

**#34**

**Recruitment of Minority Men for Prostate Education and Screening: The Prostate Outreach Project**  
*Kelly Patryce Hodges*

The overall incidence of prostate cancer is higher among African American men than among White men. Prostate cancer accounts for 39 percent of all cancers diagnosed in African American men. With an estimated 5,000 deaths anticipated in 2005, it is the second leading cause of cancer deaths in African American men. The Prostate Outreach Project (POP) serves an educational screening event where the participants are informed about the prostate gland, prostate cancer and early detection. The education tool utilized is a culturally appropriate video entitled "Listen Up II". The participants also undergo a screening process that consists of a prostate specific antigen (PSA) blood draw and/or the digital rectal exam (DRE). POP began initially with two satellite clinics in two predominantly African American communities in Houston, Texas. The proposed screening goal was 1,000 men per year. Recruitment was initially conducted using the traditional outreach methods of flier/poster distribution, e-mail blasts, and mass media. During the first year, there were 86 screening events conducted, which resulted in the screening of 509 men. At the completion of year one of the study, POP acquired a mobile unit that resulted in the doubling of the number of screened participants. Approximately 255 men were screened during the first three months of the mobile unit's use. These findings demonstrate the usefulness of providing mobile education and screening units in the African American community. Mobile education when linked with community outreach efforts increases the efficacy of prostate cancer screening efforts in African American men.

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**#35**

**Diversity Enhancement Program, The Best Care For Everyone**

*Jacquelin S Holland, Electra D Paskett , Deborah Dawson , Chasity M Cooper, William J Hicks*

The Diversity Enhancement Program is a department of The Ohio State University Comprehensive Cancer Center and the James Cancer Hospital and Solove Research Institute developed to increase the diversity of faculty, staff and patients and to increase the accrual of diverse populations, e.g., gender, race/ethnicity, age and rural/urban residents to clinical trials in cancer. The program has been in existence for three years and uses internal and external approaches that may alleviate the problem of the low minority accrual to clinical trials. Internally, staff development is ongoing, externally programs are designed for the community and presented in many different venues. Many barriers exist affecting the accrual to trials including lack of awareness, lack of access, fear, distrust and cost. The department activities are designed to ensure that with future diagnoses of cancer, individuals will be familiar with clinical trials and will be able to make informed decisions about participation.

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**#36**

**A Hepatitis B Education Outreach and Screening Program for the Asian American Community in Montgomery County, Maryland.**

*Chiehwen Ed Hsu, Louis Chih-Hung Liu, Julie Bawa, Sun Young Kim, Ulder Tillman, Mark Li*

**Background:** National statistics suggest that Asian Americans are on average at 3 times higher risk compared to their counterparts of other race/ethnicity of dying of liver diseases and their complications. A recent Asian American health study in Montgomery County, Maryland, conducted by University of Maryland has confirmed the parallel of this disease with national statistics in the Asian community: Hepatitis B infection and liver cancer were among severe disease concerns in 4 Asian American communities.

**Rationale:** It was estimated that Hepatitis B infection accounts for 10% south-east Asian population; however, its prevalence in Asian American community is relatively unknown. In addition, there is a perceived need of assessing the effectiveness of educational intervention as well as collecting and reporting prevalence data of the disease in Asian Americans. Purpose of the study: This project seeks to assess Hepatitis B health education, provide preventive service, and produce baseline data for ongoing surveillance of the disease.

**#36 (continued)**

**Methods:** Survey instruments of 10 questions were used to assess the effectiveness of the Hepatitis B health education delivery. Participants receive pre and post tests to assess their knowledge enhancement in terms of Hepatitis B prevention. For screening, a representative sample was drawn from major Asian American subgroups residing in Montgomery County, MD. Prevalence of Hepatitis B infection was calculated based on those with positive test results against all enrolled subjects.

**Results:** More than one hundred fifty members from the Chinese and the Vietnamese communities enrolled in Hepatitis B health education, completed pre/post tests, and received screenings in December 2005, with anticipated participation of additional 850 members of Asian Americans from other subgroups in early 2006. **Implications:** This pilot project demonstrates a collaborative community project supported by County's Asian American Health Initiative, that is built upon the strengths of a coalition of community physicians, community/faith based organizations, and academic institution. In terms of minority health, this project assessed the needs of health education intervention, established baseline data for health planning, and addressed the data collection and reporting among Asian Americans. The implementation experience and lessons learned from this project can be valuable for reference to other Asian communities.

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**#37**

**Exercise, Stress, and Quality of Life in Hispanic Breast Cancer Survivors**

*Daniel Carlos Hughes, Naus Mary J*

**Background/Rationale:** Breast cancer is increasing in the U.S. Hispanic population. Stress has been linked to many debilitating conditions, including cancers. Exercise is an effective stress management tool as well as important for physical health. The number of Hispanic women who get enough exercise is very low, so promoting exercise in this population holds particular promise for improving individual quality of life and potentially reducing health care costs.

**Purpose:** We hypothesized that an exercise program would improve physical fitness and quality of life; and, result in lower perceived stress and salivary cortisol. **Methods:** We designed and implemented an individualized 10-week exercise program for Hispanic breast cancer survivors in Houston, Texas. Measures of fitness (cardiovascular, body fat, muscular strength, flexibility), quality of life (Medical Outcomes Study Short Form-36 Health Survey), self-reported stress (Cohen's Perceived Stress Scale), and salivary cortisol were taken repeatedly before, during, and after the intervention.

**Results:** Twenty-five women completed the study. We found that the exercise intervention was associated with improved physical fitness, reduced perceived stress, and decreased salivary cortisol levels. **Implications:** The results suggest a positive impact on the future physical and emotional health of this fast-growing segment of the population that could ultimately reduce public health care costs.

## #38

### Correlation between BMI and Leptin in Postmenopausal Hispanic Women

Pooneh Jahadi-Yazdi, Richard A Hajek, Maria Schettino, Lovell A Jones

Leptin is mainly secreted by adipocytes and indicates the size of energy stores in the body. Thirty-eight Hispanic postmenopausal women were recruited in Houston, Texas to participate in a dietary intervention study to reduce dietary fat intake while increasing fiber intake. The women were randomized by site into a high-fiber and low-fat intake (LFHF) group (n=13) or a high-fiber with no modification in fat intake (NFHF) group (n=25). One participant in the LFHF group was an outlier and her data were removed from all analyses. Anthropometric measurements, dietary intake assessments, and blood samples were collected at baseline and 12 months. Percent body fat was measured using Total Body Electrical Conductivity (TOBEC) and serum leptin levels were measured by RIA. The effect of diet on leptin levels was investigated. Spearman's rho correlation was used to determine relation between different body fat distribution (Body Mass Index, BMI; percent body fat, % BF; and waist to hip ratio, WHR) methods and leptin levels. There was not a significant change in leptin, BMI, %BF, WHR, over the 12-month period. Dietary fat intake did significantly decrease in the LFHF group compared to the NFHF group ( $p<0.015$ ). There was no correlation between weight change, BMI, %BF, or WHR and leptin in the NFHF group. However, BMI ( $r=0.695$ ,  $p<0.001$ ) was significantly correlated with change in leptin in the LFHF group. This study is in accordance with other similar studies. In Hispanic postmenopausal women BMI change is correlated with change in leptin in a high-fiber, low-fat diet.

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## #39

### The Influence Of Race On Cancer Patients' Concerns Over Understanding The Diagnosis And Treatment Plan.

Pascal Jean-Pierre, Gary Morrow, Joseph Roscoe, Jennifer Carroll, Elliott Fishkin, Rhavi Khanna, Colmar Figuearao-Moseley, James Wade

**Background And Rationale:** A cancer diagnosis impacts on patients, their family and friends on many psychosocial, physical, economical, and quality of life levels. The difficulties associated with cancer are generally greater for ethnic minorities, who usually endure an unequal burden and sufferings from cancer. Many studies showed that socio-demographic backgrounds influence individuals' illness perception, health beliefs and behavior, and health communication. However, studies that examine the roles of socio-demographic backgrounds in cancer patients' concerns over understanding their diagnosis and treatment plan are relatively absent.

**Purpose:** The present study examined the roles of cancer patients' socio-demographic backgrounds (age, race, gender, education and occupation) in their concerns over understanding the diagnosis and treatment plan.

**Methods:** The present sample included 973 (630 females, 343 males) cancer patients between 20 to 92 years-of-age. The sample was split by race (White and non-White), and t-tests were conducted which showed no difference between the groups on education and occupation. Subsequent hierarchical regressions revealed that socio-demographic backgrounds significantly predicted cancer patients' concerns over understanding the diagnosis and treatment plan ( $p < .001$ ). Age and race was the best predictors of concerns over understanding the diagnosis (age Standardized Coefficient Beta (SCB) = -.16,  $t = -4.74$ ,  $p < .001$ , and race (SCB) = .096,  $t = 3.02$ ,  $p < .003$ ), and treatment plan (age (SCB) = -.16,  $t = -4.62$ ,  $p < .001$ , and race (SCB) = .09,  $t = 2.82$ ,  $p < .01$ ) for cancer. Additional logistic regressions also showed that age and race significant predicted the likelihood that patients will indicate that additional information would have been helpful in dealing with concerns over understanding the diagnosis and treatment plan for cancer. Overall, the findings showed that younger patients and non-Whites reported more concerns over understanding the diagnosis and treatment plan for cancer.

**Implications:** The results showed that race matters, even when controlling for the other variables. These findings underscore the need for oncology professionals to consider the importance of individuals' socio-demographic backgrounds in their work and communication with multicultural clienteles.

Supported by NCI-PHS Grant U10-CA37420.

#40

### **Crosstalk Between p53 and NF- $\kappa$ B in Prostate Cancer: Possible Role in Racial Differences and Clinical Outcome**

*Shubha P Kale, Danielle Haney, Asim B Abdel-Mageed, Qiuyun Yang*

Prostate cancer (PC) is among the most commonly diagnosed non-skin cancer in the U.S. Several factors influence PC including age, diet, family history and race, with African Americans displaying significantly higher mortality rates compared to the rest of the population. The aggressive nature of PC in African Americans is characterized by two features; high proliferation and a block to programmed cell death. The long term goal of this project is to better understand and dissect molecular pathways associated with high mortality rates of the minority PC patients. The main focus of this study was to determine the possible crosstalk between NF- $\kappa$ B (apoptotic, cell proliferative) and p53 (anti-apoptotic, anti-tumor) genes. Two androgen independent cell lines with constitutively activated NF- $\kappa$ B and either lacking (PC-3) or containing (DU-145) mutated p53 were subjected to luciferase reporter assays. Cells were co-transfected with control or wild-type p53 and p65-luciferase plasmids in presence or absence of TNF-alpha, a known inducer of NF- $\kappa$ B activation. Results showed that p53 inhibits NF- $\kappa$ B activation in the absence of TNF-alpha by an average of 35% and by over 50% in its presence. To demonstrate the specificity of crosstalk between these nuclear factors, the co-transfected PC-3 cells were treated with TNF- $\alpha$  in presence of wild-type or I $\kappa$ B super-repressor adenovirus constructs. Results again showed that p53 inhibits NF- $\kappa$ B, with the inhibition being more pronounced in presence of the inhibitors. These highly reproducible results demonstrate the nature of the cross-talk between the functionally opposite NF- $\kappa$ B and p53 and lay the foundation for studying the effects of androgen receptor, radiation and other factors on this interaction and ultimately PC.

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#41

### **Nueva Vida's Survivorship Support Program for Latinas with cancer**

*Adriana I Kaufma , Lidia Carnota*

**Background:** Nueva Vida, a non-profit established in 1996 by survivors and health specialists, informs, supports and empowers Latinas whose lives are affected by cancer.

**Purpose:** A breast cancer diagnosis can be devastating when a woman lacks family and social support, as is often the case for Latinas in our community. Most of them face their disease far from family and friends, in a foreign environment and often in poverty. Our Survivorship Program offers comprehensive, caring and culturally expert mental health support through a range of psychosocial interventions in the continuum of breast cancer survivorship including diagnosis, treatment and recovery.

**Methods:** Program includes: intake interview to assess women's needs; general and stress reduction support groups; therapeutic group for women in treatment; individual counseling for women in crisis or with advance disease; peer support for women recently diagnosed or in treatment. Evaluation methods: individual progress is measured with BSI-18 (Brief Symptom Inventory 18) administered at four-month intervals; participant's experience is assessed with a comprehensive, anonymous end-of year survey. Program use is evaluated by number of participants and retention rates in program activities. There are two on-going research pilot projects in collaboration with Georgetown University on quality of life and peer navigation; and one with Men Against Breast Cancer, "Partners in Survival".

**Results:** During 2004, 103 women participated in programs(peer support:30; Individual counseling:17; support groups:85; women in treatment group:24).BSI-18: at baseline 43% of the total of people assessed were classified as cases and at four months the percentage decreased to 28%.

**Implications:** Latina clients typically present with limited social support, family relationships under stress, much misinformation about their disease, difficulty in their interaction with healthcare providers and measurable levels of depression and anxiety. Nueva Vida's Mental Health program is orientated to reduce psychological distress that significantly impacts patient's quality of life and adherence to treatment.

**#42**

## **Suitability of the Jameslink Cancer Risk Assessment Tool for Diverse Populations**

*Kimberly Michelle Kelly, Amber Remy, Kevin Sweet*

**Background:** Developed in 1999, the Jameslink is a self-administered, computerized, familial cancer risk assessment tool. Feedback about the Jameslink has been positive; however, the Jameslink has not been explored in more representative populations.

**Purpose:** The current study surveyed responses to the Jameslink in the context of a no-cost Health and Fitness Expo sponsored by a local television company in the downtown area of a large city.

**Methods:** Participants (n=99) were men (22.7%) and women (77.3%) who completed a self-administered survey after finishing the Jameslink and receiving a risk assessment at the Expo. Average age was 46.3. The majority of participants were white (78.4%); although African-American (17.5%), Asian-American (2.1%), and bi-racial individuals (2.0%) were also represented. Most had attended at least some college (87.8%), and most had incomes above \$25,000 (82.8%). Non-parametric analyses were conducted to compare whites with African Americans and whites with non-whites on demographic, psychosocial, comprehension, and behavioral variables. Demographic variables included gender, age, education, income, and Jameslink-assessed cancer risk. Psychosocial variables included worry about and perceived risk of cancer. Behavioral variables included intentions to encourage friends and family to use the Jameslink and intentions to speak with a healthcare provider.

**Results:** Many (91.7%) felt the Jameslink was not difficult to understand. Intentions to encourage friends (98.9%) and family (97.9%) to use the Jameslink were high. No significant differences emerged as a function of race. These preliminary null results are encouraging as this indicates the Jameslink is usable and easy to comprehend for those of races surveyed.

**Implications:** Efforts are underway to further refine the Jameslink for use in minority populations and to promote use of the Jameslink tool in minority populations.

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**#43**

## **The Delphi Process: Creating Prostate Screening Messages**

*James Keresztury*

The Delphi Technique is a methodology for achieving consensus about a specific issue. It was originally developed as a forecasting technique but has subsequently been adopted for other applications. The Delphi Technique and consensus building are both founded in the same principle - the Hegelian dialectic of thesis, antithesis, and synthesis, with synthesis becoming the new thesis. The goal is a continual evolution to "oneness of mind" (consensus means solidarity of belief) -the collective mind, the holistic society, the holistic earth, etc. In thesis and antithesis, opinions or views are presented on a subject to establish views and opposing views and to build a consensus in a non-confrontational manner. Prostate cancer screening utilizing the prostate-specific antigen (PSA) methodology is controversial because of the lack of definitive evidence of benefit. In addition, prostate cancer screening is associated with noteworthy harms. Anxiety can be caused by the frequent false-positive results that occur during follow-up testing. Additionally, complications can result from treating prostate cancers that, perhaps left untreated, might not have affected the patient's health (CDC website, 2004). Many health care professionals believe that current evidence is insufficient to determine whether the potential benefits of prostate cancer screening outweigh its potential harms and what screening methodology is most appropriate. This uncertainty is reflected in the Centers for Disease Control and Prevention's (CDC) current position regarding prostate cancer screening. The CDC's recommendations do not currently include a recommendation regarding the use of a specific prostate cancer-screening test. The Delphi Technique was adapted by the WV Prostate Initiative to develop messages related to prostate screening for the general public through an anonymous and non-confrontational process. The overall experience, individual steps, as well as final results will be outlined in this presentation.

**#44**

**Multicultural Outreach and Education: A volunteer based approach**

*Holly L Kiger*

Reaching low-income women from diverse ethnic and cultural communities for breast and cervical cancer screening is a challenge. Economic concerns in community based agencies limit the number of staff available to do outreach and educational activities. Language and cultural barriers also hamper the number of women taking advantage of free breast and cervical cancer screening services.

This workshop will describe Center for Healthy Aging's (CHA) Multicultural Outreach and Education project that has successfully utilized multiethnic, multicultural volunteers to reach 5000+ low-income, uninsured Hispanic, African American, and other ethnic minority women each year with educational activities and triple the number of women coming for screenings. By adapting three model programs, Tell A Friend, The Witness Project ®, and Promotoras de Salud, CHA has created a well trained and supervised cadre of dedicated and passionate women who reach out to women in their own communities with specialized, culturally and linguistically relevant early detection messages.

Through the use of videos, PowerPoint, lecture/discussion, and handouts the essential ingredients of successful volunteer programs will be presented. Ways to begin new programs or increase the success of current volunteer activities will be offered. Resources needed, challenges encountered and lessons learned will be discussed.

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**#45**

**Subcellular Changes in K562 Cells after Treatment with Decitabine, A novel Anti-sickling Agent**

*Wilbert Long, Regina Knight-Mason, Shobha Sriharan*

Sickle cell anemia is a blood disease which is inherited as an autosomal recessive disorder. Hydroxyurea is the most widely used drug of treatment but is not effective for everyone. Decitabine, an anticancer agent, is in the early stages of use in man. Hydroxyurea and decitabine, both change the affinity of hematopoietic stem cells to produce fetal hemoglobin, Hb F instead of sickle hemoglobin HbS. This study examined the effects of decitabine on the hematopoietic the cell line K562 in an effort to better understand how decitabine interacts with cell proliferation and protein synthesis. The dose response results helped to determine the most ideal concentration, LD50, of decitabine to use for other studies. In this study the highest concentration of 2.4000 ~ig/ml of decitabine induced a higher proliferation than the lower dose of 0.0325 ig/ml. The dose response and protein analysis data after treatment with decitabine was compared to the previous results of hydroxyurea's effects on K562. While there was a difference in the dose response curves, there was no significant difference in percent of control of protein synthesis. Based on the concentrations of decitabine introduced into the K562 cell system, the extracellular to intracellular protein ratios differed. Decitabine does affect K562 cell growth and induced a fluctuating dose response. Hydroxyurea was not as toxic to cell growth and induced a typical dose response. Although decitabine and hydroxyurea are known to induce Hb F protein, this study indicates that the mechanism of action of decitabine and hydroxyurea may be different. Another possible reason for differences could be that the cell line had a mutagenic, carcinogenic response at certain levels of decitabine. (Sauntharajah, Lavelle, & DeSimone, 2004)

#46

### **KAB, Risk Perceptions, Barriers, and Self-Efficacy of Hepatitis B Screening and Vaccination among Vietnamese American Immigrants**

*Grace Xueqin Ma, Steven E Shive, Carolyn Fang, Yin Tan, Jamil Toubbeh, Cecily A Knauer, Anny Pham*

The CDC estimates that 1.25 million Americans are chronically infected with the hepatitis B virus (HBV); HBV contributes to nearly 80% of liver cancers and is a serious health problem among Vietnamese immigrants, who are disproportionately affected by liver cancer. Vietnamese males have the highest incidence of liver cancer of any ethnic group. Vietnamese Americans face a high prevalence of HBV infection and multiple barriers that prevent them from seeking preventive care. Understanding Vietnamese American's knowledge, beliefs, and practices regarding HBV and liver cancer in addition to ascertaining general risk perception is essential to effective health program development. This study measured perceived risks, barriers, self-efficacy, knowledge, attitudes, and behaviors related to HBV screening and vaccination among Vietnamese immigrants. Study participants were 256 Vietnamese Americans residing in Philadelphia, PA and in Southern New Jersey. Data was examined through descriptive and contingency coefficient correlation analysis. Overall, 46.3% of the sample heard of HBV or knew about the availability of screening (32.6%) or vaccination (35.5%) while 7.5% were ever screened, and 6.3% had been vaccinated. 81.3% of participants thought HBV would harm them if they contracted it, while 27.1% believed that they were at risk for contracting HBV. Knowledge of HBV, Physician's suggestion, and free or insurance covered screening were related to higher screening rates. A successful screening and vaccination program must be contextually, culturally and linguistically appropriate. Community education should emphasize the lifelong impact of HBV, its mode of transmission, and the positive outcomes that accrue from early screening and vaccination.

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#47

### **Assessing the Needs of Women with Advanced (Metastatic) Breast Cancer**

*Musa Mayer, Susan E Grober, Elyse S Caplan*

**Background:** Of the one million women diagnosed with breast cancer worldwide annually, over 400,000 women will die of the disease--40,000 in the United States. As new treatments extend life, women with advanced (metastatic) breast cancer (ABC) have increased needs for information and support.

**Rationale:** The needs of women with ABC have not been well studied. Tailored information must be developed to fill this gap in services.

**Purpose:** Living Beyond Breast Cancer (LBBC) conducted an in-depth assessment of the complex needs of women with ABC to help plan new programs and services.

**Methods:** LBBC developed a 64-question survey administered online and on paper to people with ABC. Online, in-person, print media, and telephone services were assessed.

**Results:** A total of 697 people with ABC responded, 619 online; 78 on paper. Half of those who took the survey on paper were 60 or older; nearly three-quarters of online respondents were ages 40 and 59. In a preliminary combined analysis, most were US residents. Nearly half were working full or part-time; 24% were on disability or unemployed. Three-quarters had children. At least half reported fatigue; weakness, cognitive problems, sexual dysfunction, disturbed sleep, hot flashes and pain. Only 19% found maintaining daily routines/activities difficult or very difficult. The desire for information and support was strong. Two-thirds seek information, and emotional and practical support at least weekly. Top ranked needs were for treatment information and symptom management, stress management, support groups, and referrals for medical care and insurance information.

**Implications:** Key insights into the experiences, preferences and behaviors of this underserved population will be used to inform program development at LBBC and to educate other healthcare professionals.

**#48**

### **Innovative Strategies in Oncology Patient Education: A Focus on Minorities**

*Yete McMahon, Tammy Weitzman, Jennifer Mills*

Lymphoma affects approximately 63,000 people nationwide each year. It is the most common blood cancer and the third most common cancer of childhood. There are over 30 different types of non-Hodgkin's lymphoma and five types of Hodgkin's Disease. Patients with lymphoma often struggle to understand the complexities of their disease. Ethnic minorities and those for whom English is not their native language experience particular challenges in navigating the healthcare system and managing their disease (Rudd, 2002).

Prior to the project to be discussed in this presentation, a relative paucity of culturally sensitive and reading level appropriate materials existed for lymphoma patients. This project serves as a model for disease specific cancer education and can be replicated for other types of cancer.

With the opportunity to receive grant funds from the Centers for Disease Control and Prevention the Lymphoma Research Foundation (LRF) executed a project entitled LAMP (Lymphoma Awareness for Multicultural Populations). The goal of the LAMP project is to increase awareness and educational activities among low-literacy English-speaking patients and diverse immigrant populations specifically, Hispanic and Chinese communities. Key activities of the project included: development of five fact sheets in low-literacy English; transcreation of material to Spanish and traditional Chinese. (a translation process that involves consideration of the culture of the target community); facilitation of focus groups with target population; creation of multilingual website; and outreach to healthcare providers to ensure appropriate dissemination of materials.

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**#49**

### **Innovative Approaches to Cancer Clinical Trials Education in Minority and Medically Underserved Communities**

*Margo I Michaels*

**Background:** Less than 5 percent of all adult cancer patients participate in clinical trials. The literature has yet to document any effective approaches for cancer clinical trials recruitment, especially among minority populations. There is a clear need for new approaches to address the problems of cancer clinical trial access, accrual and awareness.

**Rationale:** A new model, incorporating key components of community organization theory and community-based participatory research, may help to promote critical changes in clinical trials knowledge, attitude, and intention among both community leaders and health care providers. These changes may lead to enhanced access and accrual for all.

**Purpose of Study:** The ENACCT Pilot Education Project (PEP) is a demonstration project that supports community-based partnerships to develop and document effective approaches to foster awareness about cancer clinical trials, enhance their acceptability, and improve access to them.

**Methods:** We chose three diverse partnerships nationwide who met specific effective partnership criteria published elsewhere. We are currently providing ongoing Train-the-Trainer programs, technical assistance, and qualitative and quantitative evaluation services to these partnerships as they seek to develop culturally appropriate strategies to increase access to cancer clinical trials.

**Anticipated Results:** We anticipate positive changes in knowledge, attitudes and beliefs about clinical trials among healthcare providers, community leaders and the public; and an increase in referrals of patients to clinical trials. The action-oriented programs implemented, along with the ongoing evaluation, will help inform and improve patient recruitment planning and activities nationwide. Implications: The lessons we are learning from these approaches can inform more effective practices for clinical trial education and suggest specific direction for future research.

**#50**

**Colorectal Cancer Screening Among African Americans: A Life History Analysis**

*Lynn A Midgette, Richard Palmer*

African Americans suffer disproportionately from colorectal cancer. Compared with whites, they experience higher incidence and mortality rates for colorectal cancer. Despite the availability of effective colorectal cancer (CRC) screening methods, African Americans underutilize regular CRC screening. Research examining factors associated with CRC screening among African Americans is limited and has not fully explicated these determinants. Therefore, the purpose of this study was to investigate and identify the specific personal and external determinants influencing colorectal screening among African Americans who live in the Washington, D.C. metropolitan area using life history analysis. Semi-structured interviews with 40 African Americans were conducted to explore how life events and circumstances influenced health decisions. Participants were equally divided by gender and adherence to CRC screening. Grounded theory provided the framework for exploring life course events. The transcripts were continuously coded to identify emerging themes and ideas. QSR NVivo 2.0 qualitative software was used to do line-by-line coding of the transcript data and to support the reduction of codes into themes. A componential analysis was then conducted to identify patterns and variations between adherent and nonadherent study participants. Findings revealed that healthcare provider recommendation, knowledge and access to care influenced CRC screening decisions. Patterns of healthcare seeking established during the childhood years influenced adult healthcare seeking. Subsequent findings revealed differences between adherence groups based on predisposing, enabling, and reinforcing factors. Overall, the study findings can help inform the planning and development of interventions aimed at increasing CRC screening rates among African Americans.

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**#51**

**Incorporating Health Disparities Into A Comprehensive Cancer State Plan: Colorado's Experience**

*Sara E Miller, Alice A Bradley*

Differences in health status between groups, experienced over time, are known as health disparities. Inequities in cancer incidence, stage at diagnosis, survival, mortality, and quality of life are shown to exist across the entire range of social groups. Comprehensive cancer control plans must develop, sustain, and monitor activities, programs, and policies to eliminate cancer-related health disparities associated with race/ethnicity, level of education or income, insurance status, geographic place of residence, disability status, age, sex, sexual orientation, or any other factor for all populations. The Colorado Comprehensive Cancer Program assembled a group of experts, who make up the Colorado Cancer Coalition, to look at the current burden of cancer, evaluate programming, and establish priorities. Cancer prevention and control is an ever-changing discipline. New additions to this iteration of the Colorado Cancer Plan include a chapter dedicated to Health Disparities as well as objectives addressing health disparities woven throughout the body of the plan.

This presentation will take you through the Colorado journey to incorporate health disparities in to the cancer plan in a comprehensive meaningful manner. Partners of all backgrounds and experience joined together to lay out the ambitious objectives addressing cancer disparities in Colorado. Hear how Colorado has taken on this task with energy and strategies that you can replicate in your state/tribe/territory.

#52

**"From The Flying Deck, Get A Breast Check."**

*Selma Joyce Morris, Melissa Luck, Dan' I Jean Howard, Amanda Hill, Ruby Johnson, Gladys Long, Sylvia Clark, Elise Redden, Shirley Lewis, Dorothy Brandon*

The R.L. Brown Jr. Grady Medical Center is a primary care and occupational health facility located in the atrium of the airport. The guiding principles of the program were to address the disparities of breast cancer among this identified population. This was achieved by focusing on the "A Principles" a) Acceptability, b) Availability, c) Accessibility, d) Affordability, and e) Accountability. Multicultural and multilingual seasoned Community Health Advocates (CHAs) were hired to implement the program. CHAs obtained baseline pre/post tests, educated the airport staff, and facilitated appointments for clinical breast examinations, follow-up and mammography screenings. Quarterly, the program was done in Spanish for the Latino airport employees. Clinic staff performed complimentary breast exams, and those with abnormalities were also given complimentary breast exams from health care providers of the Grady Avon Comprehensive Breast Center. To date, over 3,500 employees/support staff has participated in the program. The program has been enhanced through ongoing lessons learned. One of the most important lessons learned consist of the ability to expand the program by addressing other cancers and chronic diseases.

#53

**An Exploration of Factors Associated with Low Mammography Screening Rates among Filipinas in Hawaii: Findings of a Focus Group with Filipino American Physicians**

*Miles Y Muraoka, Charlene Cuaresma*

**Background:** Filipinas in Hawaii have the lowest rates of ever having had a mammogram, as well having the lowest rates of having a mammogram within the last year, compared to women of other ethnicities (BRFSS, 2002). On the other hand, Hawaii's largest health insurer found that Filipino patients have very high rates of screening for other diseases (e.g., diabetes), comparable to other ethnic groups.

**Rationale:** The disparity between the rates of screening for cancer and diabetes suggests that cancer screening, and mammography in particular, may involve additional issues that contribute to low rates. While studies have examined Filipinas' reasons for not receiving screening mammograms, no studies have assessed physicians' perspective on the matter.

**Purpose:** To examine factors associated with low mammography screening rates of Filipina patients, from the perspective of Filipino American general practitioners; identify physician knowledge, attitudes, and medical practices related to mammography screening; and explore methods of increasing patient compliance.

**Methods:** A focus group with six Filipino American physicians (1 female) was conducted. In order to assess physician characteristics and screening knowledge, a brief, anonymous survey was administered. Responses were coded by the authors by consensus.

**Results:** Barriers identified by physicians categorized into three categories: attitudinal (including pain), lack of knowledge (with respect to early detection), and logistical (time constraints). Only half of the sample was able to correctly identify at what age and how often women should receive screening mammograms.

**Implications:** Future directions include conducting focus groups with Filipina patients to compare their responses. A disconnect between the two groups may prove to be useful in understanding the relationship and dynamics of patient/physician interactions with respect to mammographic screening.

**#54**

**Building Capacity: Health Advocacy and Leadership Development in Support of Latino Health Improvement**

*Susan Marie Myers*

Many Pennsylvania public health system partners recognize a need to build human and system capacity for Latino community health improvement. Pennsylvania's investment of MSA funds for specific contracted work was leveraged to initiate a much broader partnership to address Latino public health infrastructure, increase access to care, deepen faith-based partnerships, and increase chronic diseases (especially cancer).

"The Latino Health Advocacy and Leadership Program" (LHAL) was designed and implemented by Health Equity Associates under contract to I-LEAD through its contract with the Pennsylvania Department of Health. LHAL was designed to increase participant's personal skills in communication, dialogue, negotiation, conflict resolution, and system's thinking; create an adult learning community; increase participant's public health knowledge base; and create a mechanism for linking dominant culture organizations to Latino community through relationship-building. LHAL is partially based on the WK Kellogg Fellows program, the CDC National Public Health Institute and is grounded by I-LEAD and Health Equity Associates deep familiarity with local and state public health systems/partners.

LHAL has been used as an integral part of "Dia de la Mujer Latina" health festivals in Pennsylvania. LHAL advocates were used through out various planning, implementation and evaluation steps of these events.

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**#55**

**Colorectal Cancer Screening Training for Health Care Providers Serving the Hmong Population in California**

*Dawn Nozicka-Ferris, Allyn Fernandez-Ami*

Colorectal cancer (CRC) is the third most common cancer in California and nationally. If detected early, the CRC five year survival rate is 90%, yet among Californians as a whole only 39% of colon cancer cases are diagnosed at an early, localized stage. The National Health Interview Survey indicates that in 2001 less than half of men and women in the US were recently screened. In California, where roughly one third (4.1 million people) of the highly diverse Asian American population in the US reside, the screening rates are even lower (only 33% of Asian and Pacific Islanders were screened in 2001).

The California Health Information Survey indicates the most commonly reported reason for not undergoing endoscopic CRC screening was that a physician did not recommend an examination. It appears that outreach efforts and early detection planning should focus on two primary strategies: (1) Provider education and (2) Patient education.

The purpose of this project is two-fold: (1) model CRC screening programs for the Hmong using best practice methods and (2) train health care providers (HCP) to more effectively deliver CRC screening messages to the Hmong.

There are two phases of this project. In the first phase we will gather information and collect data regarding "best practices" for implementing CRC screening programs for the Hmong. The second phase will focus on training HCPs who service the Hmong population.

The immediate outcomes of this project are to: (1) develop a culturally appropriate CME course based on these best practices, and (2) provide CRC screening training to HCPs serving the Hmong population in Sacramento.

By adapting CRC screening programs for the Hmong, we will be able to attend to their cancer needs. If successful, we may be able to transfer this technology to other regions and populations.

#56

### **Natural Helpers in Health Promotion Program: Who are They?**

*Veronica Joanne Oates*

Recruiting participants for lay health interventions is a necessary component in implementing health programs aimed at reducing health disparities. While the literature suggests an advantage in choosing lay health advisors (LHAs) from among nominated natural helpers (NHs) versus recruiting volunteers to participate, little research-based evidence exists to support this advice. This study examined differences between participants nominated to become LHAs and those not nominated in a church-based LHA intervention.

Social support theory of social integration guided the study's hypotheses: nominated church NHs had greater social integration, higher communication levels at church, and more perceived social support than parishioners not nominated. Baseline data came from 151 nominated NHs and 326 parishioners participating in the Wellness for African Americans Through Churches (WATCH) project. Informational, emotional, and instrumental social support for improving diet, physical activity, and colorectal cancer (CRC) screening were measured using adapted validated scales. Communication and church integration were assessed using Likert-scale items with reliability scales ranging from 0.75 to 0.85. Multivariate regression models determined predictors of being nominated as a NH.

NHs had significantly higher social integration means ( $p=.001$ ), and perceived social support for CRC screening from close contacts ( $p=.013$ ). Regression results showed that nominated NHs were more likely to be older, have higher church integration, and communication levels than congregation members not nominated, with differences existing by gender.

Training that builds on NHs' pre-existing communication ability may help promote cancer screening and other health promotion practices. Researchers may benefit from doing baseline comparisons of interpersonal differences between NHs and their peers, as well as follow-up studies to assess the relative effectiveness of NHs in achieving study goals.

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#57

### **Assessing breast cancer knowledge and health literacy levels in senior African-American women in Harlem, New York: results from pilot interviews**

*Dionne T Otey*

Numerous studies assert that although Black women are less likely to be diagnosed with breast cancer than White women, they are more likely to die from the disease. Because older minority women are less likely to adhere to screening guidelines than White women, high mortality rates, particularly for seniors, may be related to the underutilization of preventive measures, a factor linked to low health literacy levels. The primary aim of this study is to evaluate the relationship between health literacy levels and breast cancer knowledge and practices in a sample of African-American women in Harlem, New York. Reading ability for the sample of 200 women is assessed via the Rapid Estimate of Adult Literacy in Medicine and reading comprehension via the Short Test of Functional Health Literacy in Adults. Subjects also participate in an interview to assess cancer knowledge, attitudes, and practices. Open-ended responses from the interviews are analyzed to determine the relationship between reported literacy scores and cancer knowledge and practice variables. Results from over 25 pilot interviews reveal that the sample's average REALM score is 54.12 (equivalent to a 7th-8th grade reading level), while the average STOFHLA score is 18.73 (equivalent to "marginal functional health literacy" level). Almost 100% of the sample has had a mammogram in the past and currently practices self-exams. Despite high levels of prevention practices, the majority of the sample was not informed about breast cancer risk factors. Additionally, almost 50% of the participants state that they have problems understanding and reading health information provided by their physicians. Final study results will be used to inform cancer communication recommendations for Harlem-based healthcare personnel who treat African-American breast cancer patients.

#58

### **Risk Perception and Screening Adherence for Colorectal Cancer Among African American Men**

*Richard C Palmer, Lynn A Midgette*

The incidence and mortality rates of colorectal cancer (CRC) are higher for African Americans than those of non-Hispanic whites. This disparity may be explained, in part, by the lower CRC screening rates seen for African Americans. Although the published literature has identified personal (i.e., embarrassment) and healthcare system factors as possible explanations for low screening participation, little research has explored CRC risk perception with this population. Therefore, the primary aim of this study was to examine what role perceived risk has on CRC adherence. African American males (N=252) aged 50 years and older living in Maryland were identified using random-digit-dialing and interviewed by telephone. Trained interviewers administered an 81-item survey in approximately 30 minutes. Items included demographic, cancer knowledge, cancer screening, health belief, and attitude questions, in addition to a 3-item CRC cancer risk scale (Cronbach's alpha =.72). The main dependent variable was self-reported CRC adherence (fecal occult blood test within 3 years, flexible sigmoidoscopy within 5 years, or colonoscopy within 10 years). Study findings show that CRC cancer risk mean scale scores differed significantly between adherent and non-adherent study participants ( $p=.04$ ). Having a lower risk score was associated with the greater likelihood of adherence to CRC screening guidelines. A multivariate model assessing the independent effect of CRC risk found that those with the lowest perceived risk were more likely to be adherent ( $OR=2.48$ ; 95% C.I. 1.20, 5.18). Overall, study results suggest that greater levels of CRC risk may negatively influence the decision to screen for CRC. Interventions persuading African American men with increased perceptions of CRC risk to screen could potentially help reduce the disparity seen for this cancer.

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#59

### **Advocating For Early Cancer Detection In The Asian American Community: The Health Promoter's Model**

*Ithara Phlong, Sun Young Kim, Julie Bawa*

**Background:** Cancer is one of the leading causes of death and Asian Americans have the lowest cancer screening rates compared to other minority groups. Numerous factors impede cancer screening including the lack of awareness, language and cultural barriers, and most importantly the lack of culturally tailored programs to promote the importance of early detection. The Asian American Cancer Program (AACP) of the Asian American Health Initiative increases awareness about targeted cancers (breast, cervical and colorectal) through outreach, education and provides free screening for uninsured Asian American residents.

**Rationale:** To respond to the growing population of Asian Americans in the County, affected by cancer disparities, a Health Promoter's Model is needed to provide early cancer education and awareness in a culturally sensible manner.

**Purpose Of Study:** To recruit bilingual health promoters who will assist in providing Asian Americans with culturally and linguistically appropriate education and help eliminate barriers to cancer screening services.

**Methods:** AACP partnered with local community organizations to identify and recruit 16 bilingual health promoters from diverse Asian American communities. These health promoters received training about targeted cancers, outreach strategies and leadership skills. They also met monthly as Coalition members to network, share outreach strategies and receive on-going training.

**Results:** Since the inception of the AACP, from July 2002 through October 2005 the program educated 5996 Asian Americans, and 1034 eligible clients were referred for targeted cancer screenings (222 completed colonoscopies and 2 cancers detected).

**Implications:** Combinations of strategies are needed to outreach to this diverse community and the utilization of bilingual health promoters proved to be very effective. AACP's recommendations include: Development of community partnerships, recruit and train bilingual health promoters, provide outreach/education in native languages and conduct media campaigns. This Health Promoter's model can be replicated in developing other health program targeting the diverse Asian American community.

## #60

### **Engaging Latinas to enhance community-based tobacco control and cancer prevention efforts**

*Athena K Ramos*

Smoking rates among Latinos overall tend to be lower than non-Hispanic whites; however, tobacco products are advertised and promoted disproportionately to Latinos and other racial/ethnic minority communities. To increase its credibility the tobacco industry contributes money to programs focused on education for Latinos. The industry also contributes to cultural Hispanic events and provides significant support to the Hispanic art community.

Tobacco Free Nebraska and the Nebraska Comprehensive Cancer Control Program recognized the health disparities amongst the Latino community and allocated funds to promote activities in the community in order to share information, educate, motivate, and provide mutual support to fight tobacco.

The Cardiac Center of Creighton University received the contract to form a planning committee to put on a women's summit to talk about the tobacco control and cancer prevention issues in the Latino community. The committee created the first and only Latina health summit in Nebraska to be completed presented in Spanish looking at issues of tobacco marketing, secondhand smoke, advocacy, and how other factors can impact smoking behaviors such as domestic violence and stress management.

The First Latinas, Tobacco, and Cancer summit was held on November 9, 2005. Approximately, fifty Latinas attended the summit and learned how to apply prevention principles in their household. Participants worked in small groups to create an action plan for themselves to fight tobacco in the community.

This summit is the basis for a movement of Latinas to take control of tobacco and to create and motivate women to action in a culturally appropriate and meaningful manner. Organizing Latinas will lead to a strengthening of tobacco and cancer prevention in the community.

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## #61

### **Developing a comprehensive community-based hepatitis B prevention program: The Asian-American Hepatitis B Program in New York City**

*Ruchel J. Ramos, Thomas Tsang, Henry Pollack, Alex Sherman, Mariano J Rey, Hillel Tobias*

The prevalence of hepatitis B, which can lead to liver-related diseases and liver cancer, is disproportionately higher in the Asian American community, where it is about 10-15 percent as compared with the general US population, where it is less than 1 percent.

To address this epidemic, a coalition of New York City institutions and citizens dedicated to reducing the burden of hepatitis B infection formed the Asian American Hepatitis B Program (AAHBP). With funding provided by the New York City Council, the coalition set out to increase awareness, and conduct outreach, education, screening, vaccination, and follow-up care among NYC's Asian Americans.

After an intensive planning period, AAHBP became operational in January 2005. In the subsequent 5 months a large media and outreach campaign was begun, more than 1800 persons were tested for HBV, 500 persons at risk for infection were vaccinated, and 300 HBV infected persons were identified and referred for evaluation and treatment.

These successful efforts demonstrate that with committed and broad-based support among partnering organizations, media networks, supportive government, and the community, it is possible to overcome cross-institutional obstacles and work collaboratively to address an unrecognized epidemic and provide services to those most in need.

#62

### **Unequal Treatment: Medical Education in New Jersey and California** *Gloria C Ramsey*

Racial and ethnic disparities in health care-- whether in insurance coverage, access, quality of care, cultural and linguistic competency-- are one of the many factors contributing to inequities in health in America. Eliminating these disparities is a priority. Two states have taken measures to end cultural and linguistic incompetency by passing legislation requiring that physicians be culturally and linguistically competent health providers. This session will discuss efforts made by New Jersey and California to provide training for physicians.

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#63

### **If we build it, will they come? Evaluating the receptivity of underserved Black men to e-health technology to obtain prostate health and prostate cancer information** *Joann T Richardson, Gwendolyn G Parker, Michael A Pyles, Unyime Nseyo*

Because of the unequal burden of prostate cancer and the severe knowledge gap that leaves medically underserved Black men chronically uninformed and out of the mainstream of current, cutting edge cancer information, the purpose of this study was to investigate the receptivity of the target population to e-health technology for prostate cancer information. As a result of the digital divide, which is widening at lower income levels and among racial minorities, the target population lacks e-literacy and is digitally isolated. Therefore, as a result of this study, insight was obtained as to whether they are receptive and willing to utilize e-health technology for prostate health and prostate cancer information as well as the preferred format, content and sites for the technology intervention. Inasmuch as traditional educational techniques (e.g., pamphlets, brochures, lectures) have demonstrated limited positive impact on the target population, alternative educational strategies need to be considered and actualized.

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#64

### **Colon Cancer Awareness Campaign Targeting The Chinese American Population** *Sandra Robinson*

**Objective:** To create culturally appropriate health information ads, by collaborating with Asian ad agencies, to encourage the Chinese American population to learn more about colon cancer and reinforce the importance of early detection and prevention. **Methods:** Four leading Asian American owned competing advertising agencies joined forces to launch a pro-bono media campaign to raise colon cancer awareness and screening rates among Chinese Americans in the United States. The agencies, AAAZa Advertising, Dae Advertising, InterTrend Communications and the IW Group created four print ads in Chinese and English. These ads featured survivors of Chinese American descent, who volunteered to tell their stories of survival. The print advertising was run from June to August, 2004. Three Chinese press releases were distributed to strengthen the awareness campaign.

**Results:** The ads were run during a three-month period. Key print media not only provided a special discount and bonus to support the campaign, but also committed to donate available spaces to extend the advertising period to the end of the year. The result was the campaign achieved a significant value of \$42,642.48 against the \$27,827.56 budget. The advertising frequency reached 66% more than average nonprofit ads campaign. The campaign solicited more than 200 calls during the three-month advertising period, and generated 30 news clippings through Chinese press release distributions. With 90% key messages delivered, the value of news clippings was equivalent to the advertising value of \$18,818.40. The Colon Cancer Awareness campaign targeting the Chinese American population generated positive responses and feedbacks from the Chinese community.

#65

### **Racial/Ethnic Disparities in Women Utilizing a Complimentary Breast Cancer Screening Program**

*Evelyn Robles-Rodriguez, Generosa Grana, Erin O'Hea*

The Camden County Cancer Screening Project provides outreach, education and screening services to uninsured individuals. The purpose of the present study was to examine racial/ethnic differences in women (N = ~6,000) utilizing the screening program. Racial composition was 28% Hispanic, 34% African American, and 39% Caucasian. Approximately 80% were between the ages of 40-60 years. 68% had a previous mammogram and 60% were one-time users of the program. Main referral sources included; breast screening reminders (35%), outreach (44%), health care provider (16%), and self (5%). We examined racial differences in referral sources, frequency of use of the program, previous mammograms, and final diagnoses. Chi Square Analyses demonstrated that Caucasian, African American, and Latino women did not differ in their referral sources, frequency of use of our program, or final diagnoses. However, there was a small significant difference found between Caucasian and Latino women for previous mammogram, with 41% of Caucasian women reporting a previous mammogram compared to only 26% of Latino women. The present results highlight the effectiveness of community outreach efforts and annual reminders. Findings are congruent with the health belief model, which suggests that cues to action are needed in order for a health behavior to occur. Further effort by health care providers to promote utilization of screening programs is warranted. The strength of this study is that we examined racial differences in a large sample of women that had similar income and education. The lack of significant racial differences would suggest that it may not be racial/ethnic issues that are relevant for health disparities, but rather differences that have been found in the literature may be due to socioeconomic status differences. Many studies examining racial differences have neglected to control for income and education level; however, researchers in this field are now becoming more aware of this oversight and studies like the present one are fodder for the argument that socioeconomic status influences health related variables more so than race or ethnicity.

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#66

### **A Litany of Symptoms from the Mind, Body, and Soul: Breast Cancer Survivorship in African American Women**

*Kathleen M Russell, Joan E Haase, Wendy Kooken, R Brian Giesler, Kim Wagler Ziner, Yueh-Feng Yvonne Lu*

A complex picture of factors affects adaptation following diagnosis and treatment of breast cancer for African American women survivors. African American women often describe health as an integration of the mind, body, and spirit. Yet, little is known about these views in the context of cancer survivorship. The purpose of this study was to gain a clearer understanding of these aspects of breast cancer survivorship for African American women and to identify how these factors affected their perceived quality of life. We conducted 3 focus groups with 21 African American women across socioeconomic strata who were breast cancer survivors from 1 to 10 years post initial treatment. Using a phenomenological analysis combined with group-as-a-whole theory, we found even though experiences differed among the women, the experiences emerged around the following clusters: (1) a litany of physical symptoms, (2) mixed emotional responses, including vulnerability, shame, fear and being pulled in different directions, and (3) a very strong connection to a higher being with conflicting feelings. Findings point to closely examining our approaches to care when addressing needs of African American women breast cancer survivors and to integrating and tailoring interventions in their physical, psychosocial and spiritual domains. Further research also is needed to assure that our current quality of life measures are inclusive of African American women.

**#67**

**Texas Cancer Control Toolkit: Bringing the Texas Cancer Plan to Communities**  
*Juanita Salinas*

A Coalition subcommittee developed a Toolkit, which could be used by communities seeking to increase their local cancer control efforts. Feedback from public and statewide cancer organizations was used to develop the Toolkit contents. A mock-up of the Toolkit was used to further refine the Toolkit. Workshops that introduce local cancer control experts to Toolkit purpose and contents are being conducted in eight communities in early 2006. Follow up interviews will be conducted with workshop participants to assess the Toolkit's effectiveness and determine progress in advancing collaborative cancer control efforts.

**Results:** Preliminary results from the Toolkit mock-up presentations and the initial Toolkit workshops indicate that the Toolkit has been well received and that participants plan to use it to enhance cancer control in their communities. Evaluation results show that 96% of respondents indicated the Toolkit contained important information and 86% rated it helpful to cancer control efforts.

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**#68**

**African American breast cancer survivors: The mediating effects of coping on social support and distress**

*Mekhala Samsi, Mary J Naus, Diane L Bailey*

Social support and its influence on coping and health outcomes for African American breast cancer survivors has consistently interested researchers studying minority health issues, particularly after findings in the literature indicate that African American women may access different sources of support than that which is typically reported in the literature. While studies have identified the importance of social support to the process of coping with breast cancer in African American women, few have examined how the presence of social support impacts distress experienced after treatment.

The present study examined the effect of social support on distress in African American breast cancer survivors and further investigated whether coping processes mediate this relationship. Additionally, it was argued that the relationship between social support and coping was bidirectional in that 1) the presence of social support determines the use of certain coping processes and also that 2) the use of certain coping processes determines the type of support one received.

Strategies for effective recruitment were identified by conducting focus groups at community organizations like the Sister's Network, and their implementation resulted in the successful recruitment of 87 African American breast cancer survivors. All participants completed a questionnaire booklet on eight key constructs, of which social support, distress and coping were included in the present study.

Path analysis involving simultaneous multiple regression equations were conducted to test the hypotheses, and social support was found to be a significant predictor of distress. Additionally, results indicated that the association of social support with distress was significantly mediated by coping processes employed.

The present study allows for a better understanding of quality of life issues for African American breast cancer survivors, setting the stage for additional research with African American survivors and facilitates in the designing of important interventions and public policies that impact this underserved group.

#69

### **Attitudes Toward Genetic Testing and African Ancestry: How is Genetic Research Valued?**

*Eunice Rebecca Santos, Rick A Kitchens, Charmaine Royal, Carolina Bonilla*

Previous research has shown that African Americans distrust research; genetic research in particular. Yet genetic medicine has the potential to do more than just predict. It may ultimately be used at a personalized level to prevent and treat disease. There is a need to better understand the perceptions and attitudes toward genetic research that focuses beyond rare disorders. Insight into the knowledge, attitude, and behavior of African Americans is needed to better tailor prevention and treatment for individuals with high risk for cancer. Triangulation of quantitative and qualitative data helps elucidate associations between the knowledge, attitudes, and behaviors of two comparable populations. A volunteer sample of 200 adult participants was surveyed using Likert scale and open-ended questions that assessed knowledge, attitude, and behavior towards genetics testing. Triangulation of concepts combined quantitative (contingency tests) and qualitative data (content analyses) to investigate reported perceptions with behavior relevant to genetic testing. Two groups of 100; one from Oklahoma

City and another from Cincinnati were used. Total population for Cincinnati is 350,000 with 43% of the population being African American. The total population for Oklahoma City is 500,000 with 15% of the population being African American. Baseline demographics of the two groups were comparable. Quantitative analysis showed an association between different levels of knowledge regarding DNA testing and education ( $p<0.005$ ). There was also an association between behavior and employment status ( $p<0.005$ ). Content analysis of the free-response survey questions showed recurring themes of prevention and family as important in seeking genetic testing. In comparison, a deterrent to seeking genetic testing was commonly stated to be the suspicion of abuse of information or violation of privacy. Insight and understanding of knowledge, attitudes, and behaviors toward genetic research could possibly help maximize the impact of biomedical advances on communities most affected by health disparities. Proper utilization of genetic research could lead to more than diagnoses but also improving the odds through prevention and possible treatment; thereby fine tuning clinical treatment.

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#70

### **ECIS Measurements in Electroconductive Polymers Using Human Muscle Fibroblasts**

*Tarun Saxena, Sheena Abraham, Anthony Guiseppi-Elie, Nasser Ghariban*

Electric cell substrate sensing (ECIS) was used to interrogate the impedance profiles of composites of conducting polypyrrole (PPy) formulated within cross-linked poly (2-Hydroxyethylmethacrylate) (p-HEMA) based hydrogels. Human muscle fibroblasts were cultured atop these composites and viability and proliferation data was collected using a hemocytometer to monitor biocompatibility of these bioactive polymers. ECIS interrogation was performed for 3 days to monitor cell growth. Also, the hydration profiles of p-HEMA hydrogels incorporated with varying methacryloyloxyethyl phosphorlycholine (MPC) [0-10 mol%] and poly (ethylene glycol) (200) monomethacrylate (PEGMA) [0.0-0.5 MOL%] were studied using ECIS. The observed constancy of impedance response of hydration graphs offers a promising approach for development and application in cell-based sensing. An excellent area of application is that of microfluidic cell-based sensors with well-positioned recording sites for cell, virus, and bacterial adhesion.

**#71**

**Building partnerships between research settings and communities: A model for colorectal cancer prevention in African American churches**

*Isabel C Scarinci, Collette Strother, Selwyn Vickers, Mona Fouad, Dennis Pillion*

Partnerships between academic research settings and the community-at-large represent an excellent venue for health promotion and disease prevention programs in hard-to-reach populations. This presentation will describe a unique partnership developed by an academic setting, the University of Alabama at Birmingham, and community members in Jefferson County, AL. One of the purposes of this partnership is to reduce/eliminate health disparities between African Americans and whites with regard to colorectal cancer. Using a community-based participatory approach and following the Empowerment Model, we established a coalition of community volunteers. They were charged with development and implementation of a community action plan with measurable objectives, sound methodology, and an evaluation plan. The coalition (Healthy Congregations Healthy Communities) developed and implemented a culturally-relevant, spiritually-based program to train congregational health leaders in local churches to disseminate cancer information and facilitate health care access among congregation members. The curriculum had two major components: knowledge (e.g., colorectal cancer, nutrition) and skills (e.g., communication, problem solving skills). Coalition members assisted in the writing of the curriculum and delivery of training sessions. Four local churches were selected by community volunteers to participate in the pilot-testing of the program. Once the congregational health leaders were trained, they became the leaders of the program and the coalition moved to an advisory role. Sustainability has been successfully addressed since the program's inception. This presentation will focus on the development of the coalition, development and implementation of the community action plan, obtained results as well as lessons learned.

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**#72**

**Socioeconomic status and physical activity among African Americans in church settings**

*Isabel C Scarinci, Andres Azuero, Selwyn Vickers, Collette Strother, Sharina Person, Mona Fouad*

Studies have consistently shown that African Americans are more sedentary than Whites. Some studies have examined the relationship between socioeconomic status (SES) and physical activity (PA) among African Americans. However, one of the limitations in the literature is that SES has been examined in many different ways, and it is not known whether researchers are measuring the same construct. Previous studies also failed to examine the relationship of SES, age, and gender and their association with PA. This study examined the relationship between two SES indicators (income and education) and PA among African Americans in church settings; determined which SES variable was most strongly associated with PA; and examined whether the relationship between SES and PA is the same across age and gender. A total of 607 African American adults completed a survey on health status. Independent variables included income, education, age, and gender. The dependent variable was number of days participants engage in at least 30 minutes of moderate physical activity in an average week. Bivariate associations between PA and demographic were examined. Variables found to be significant were included in a final multivariable regression model. Results: Education and gender were the only variables significantly associated with PA with p-values of  $p=0.0364$  and  $p=0.0020$  respectively. In multivariable models only gender was significant with males having more physical activity than females ( $p=0.0003$ ).

#73

### **Sociocultural Features and Health Profiles in Long-Term Hispanic Testicular Cancer Survivors**

*Pamela N Schultz, Martha Beck, Charles Stava, Rena Vassilopoulou Sellin, Charles Stava, Charles Stava*

Chemotherapeutic modalities have improved survival rates for men with testicular cancer, 5-year survival rates are about 90% to 95%. The literature recently has focused on long-term sequelae and quality of life for these cancer survivors.

However, most of the research has originated from Western Europe. There is an obvious gap in the research of minority populations with testicular cancer and long-term health effects.

One purpose of this study was to describe health profiles of long-term testicular cancer survivors with an emphasis on Hispanic ethnicity. Findings will be compared with non-Hispanic survivors and other long-term cancer survivors.

The Life After Cancer Care (LACC) program at The University of Texas M. D. Anderson Cancer Center focuses on the cancer- and cancer treatment-related health concerns of cancer survivors. Within the context of the LACC program, a survey was developed to gather information about the health profiles of cancer survivors. To date, data have been collected from over 10,000 long-term cancer survivors. In addition to the surveys, medical records were reviewed to document a more complete medical history. The resulting cohort was 182 long-term survivors of testicular cancer. Descriptive statistics were used to describe the population, focusing on health data, sociocultural characteristics; comparisons were made using chi-square, univariate analysis and correlation coefficients among ethnic groups.

Even though only 10% of the study population self-identified themselves as Hispanic, there were some significant differences between Hispanic and non-Hispanic survivors of testicular cancer. Age at diagnosis, extent of disease patterns at diagnosis, self-reported health effects, marital status, and the influence of family relationships differed significantly in Hispanic vs. non-Hispanic testicular cancer survivors.

The cultural differences in the experiences of testicular cancer survivors in this study may be a reflection of the complex relationship between social and physiologic elements in shaping the sequelae of cancer treatment.

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#74

### **Breaking Barriers: A Navigator Program of Cancer Care for the Underserved Populations**

*Karen Ann Schwaderer, Laura Hoffman, Keith Morgenlander, Chyongchiou J Lin, Barbara Klewien, Dwight E Heron, Elaine Martz*

**Background:** Cancer is the second leading cause of death in the United States and Pennsylvania. In 2001, the age-adjusted mortality rate of cancer in Pennsylvania was 202.2 compared to 196.0 nationally (per 100,000 population). African American men and women continue to have greater cancer mortality rates in Pennsylvania than their white counterparts. Mortality rates of cancer for African American women in Pennsylvania increased from 210.1 in 2000 to 222.4 in 2001.

**Rational:** The racial disparities in cancer care exist in Pennsylvania despite various state programs implemented to assist minority and low-income populations in obtaining cancer treatment.

**Purpose of study:** To describe the model, implementation, and evaluation of a Patient Navigator program sponsored by a 5-year NCI funded Radiation Oncology Community Outreach Grant (ROCOG).

**Theoretical Approach:** The logic model proposed by the National Cancer Institute was used as the basic theoretical approach in this study to evaluate the patient navigator program.

**#74 (continued)**

**Methods/Materials:** An innovative Patient Navigator model was developed to reduce negative consequences of cancer disparities seen in underserved populations. The program targeted two major populations at increased risk of getting cancer: inner-city African American communities and rural communities. The program was designed to enhance timely entrance into the health system and assist patients with problems associated with a cancer diagnosis. A database was developed to record the type of barriers and track the amount of time spent on each issue. Patient and physician surveys were conducted.

**Results:** Based on the data collected from January through August 2005, there were 98 patients in total consented to participate in the NP. Among them, about 34% were African Americans in the urban facility while only 9.4% were African Americans in the rural facility. On average, 60.8 minutes were spent per patient in the urban facility while 70.9 minutes per patient in the rural facility. Health insurance approval, out-of-pocket payment, and transportation were the major primary barriers of treatment.

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**#75**

**Racism and Cancer Prevention: The role of perceived racism and race-based residential segregation on cancer behavioral risk profiles**

*Salma N Shariff-Marco*

Cancer is a significant public health problem in the United States. Racial/ethnic disparities in cancer exist and while some groups have experienced decreases or a leveling off with respect to their cancer burden, others have experienced increases. While there is evidence that cancer prevention behaviors may contribute to a reduction in the cancer burden, they are not being fully utilized by all adults with prevalence rates varying by racial/ethnic groups. Racism has been identified as a potential contributor to these disparities with limited research evaluating the relationship between racism and cancer prevention. The goal of this study is understand the relationship between racism and cancer prevention. The research questions are: 1) What is the prevalence of perceived racism and what are the common characteristics of those who report being exposed to racism? 2) Is there an association between racism and cancer prevention and if so, what are the mediator/moderators of this relationship? 3) Is there a cross-level interaction between race-based residential segregation and perceived racism that influences cancer prevention? Using cross-sectional data from the 2003 California Health Interview Survey, the study will draw from over 42,000 adult respondents representing the five main aggregate racial/ethnic groups. Descriptive analyses will be conducted using univariate and bivariate analyses. Ordinal logistic regression as well as multilevel modeling will be utilized for the individual level and multilevel analyses, respectively. Preliminary results indicate that 20% reported experiencing overall discrimination, while 6% reported experiencing discrimination within the health care context. These responses varied by race/ethnicity, ranging from 12% to 60% for overall discrimination and 3%-14% within the health care context. This research will provide information on the prevalence of perceived racism across all major racial/ethnic groups. The research findings may support and inform health care setting interventions addressing discrimination and promoting cultural competency.

#76

### **Genomic Signal Processing for Cancer Detection**

*Ehsan Ollah Sheybani*

Recent methods facilitate large-scale surveys of gene and protein expression in which transcript levels can be determined for thousands of genes simultaneously. In particular, expression microarrays result from a biochemical-optical system incorporating robotic spotting and computer image formation and analysis. Analytical tools are required to detect and model the decision-making processes of genetic networks.

Owing to the major role played in genomics by transcriptional signaling and the related pathway modeling, it is only natural that the theory of signal processing should be utilized in both structural and functional understanding. In particular, Genomic Signal Processing (GSP) aims to integrate the theory and methods of signal processing with the global understanding of functional genomics, with special emphasis on genomic regulation. Since genes execute their functions via both transcription and translation (protein formation), a comprehensive understanding of how the genome controls the development and functioning of cells requires the study of both genomics and proteomics. This presentation is aimed at applying signal processing methods in the area of systems biology relating to genomics and proteomics. While this certainly includes GSP, it also includes processing genomic signals and extends to applications related to genomics and proteomics. The goal is to provide a broad overview of a genomic or proteomic problem raising interesting questions to the signal processing community for early detection of cancer cells.

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#77

### **NBCCF Stop Breast Cancer: Personal Stories, Public Action**

*D'Neisha Simmons Jendayi*

NBCCF has long recognized that unless quality health care is available to all, we will not end breast cancer. Our goal is to move Congress and the Administration beyond incremental approaches. NBCCF is researching viable policy options that will accomplish this goal, and has developed principles and core values that should be incorporated into any plan to guarantee access to quality care for all.

NBCCF developed the Stop Breast Cancer: Personal Stories, Public Action™ campaign to capture the collective wisdom of women and their families and put a human face on the current crisis surrounding the U.S. health care system. Although focused on breast cancer, the stories provide insight into the broader health care crisis and help identify strategies for improvement through social and political change.

This is a compilation of volunteered information from women – and some men and loved ones – who self-selected. We solicited submissions from our grassroots network, and have received 600+ stories from broadly diverse populations, including stories submitted from all states and the District of Columbia, and in Spanish.

NBCCF created web-based and print versions of our campaign kits, which are both available in English and Spanish. The enclosures are based on our principles and core values. We analyzed the data based on our quality core values and also examined insurance status, treatment coverage, and employment status. The results indicate that breast cancer survivors are experiencing gross violations to most aspects of quality care – violations that too often lead to irreparable damage or death. These findings stress the urgent need for legislators to make access to comprehensive and high quality care for all a national priority.

**#78**

### **The National Cancer Institute's Cancer Information Service Research Program**

*Linda Squiers, Brandy L Peterson*

**Background:** The National Cancer Institute's Cancer Information Service (CIS) partners with investigators to develop and implement collaborative, mutually beneficial research projects that will further the field of cancer communication, inform CIS service delivery, and bridge the chasm between research and service.

**Rationale:** The CIS Research Program (CISRP) was developed to test innovative cancer communication interventions within a service delivery program.

**Purpose of Program:** The CISRP tests health communication interventions within an existing information infrastructure that directly serves cancer patients, their friends and family members, health professionals, the media, and the general public. In addition, the CIS is well-positioned to participate in community-based participatory research through collaborations with partner organizations that reach minority and medically underserved populations.

**Results:** In early 2005, the CISRP launched a National Research Agenda which is heavily focused on cancer health disparities among minority and medically underserved populations. The Agenda addresses four areas of interest: 1) testing innovative cancer communication and education interventions; 2) increasing access to and appropriate use of cancer-related information and education; 3) discovering effective models for disseminating successful cancer communication and education interventions; and 4) understanding information seeking. In addition, the CISRP's research infrastructure includes four doctorally-prepared Senior Research Coordinators who assist researchers in developing and implementing collaborative studies and a data collection system that researchers can utilize in studies. In collaboration with NCI's Division of Cancer Control and Population Sciences, the CIS has developed targeted funding opportunities for researchers interested in identifying barriers to access and utilization of the CIS. Details about this initiative will be described.

**Implications:** Often called a "living laboratory for cancer communication research," the CIS offers researchers a unique opportunity to partner on cancer communication studies that further the field of health communication and cancer control.

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**#79**

### **Introducing IHEA.info: A Unique Cancer Education Resource for Immigrants In the United States and Beyond**

*Alireza Tafarodi*

Cancer is a complicated disease and is understood differently in every culture. Prevention and early detection as methods of fighting cancer are unknown in many cultures. Ignorance of prevention and detection methods, as well as lingering superstition render cancer a complex and seemingly unfathomable enigma to the members of many ethnic groups.

Statistical information about cancer incidence and cancer mortality rates in most ethnic groups is available. But the members of these groups often do not know this information. If the information was known, the people might become mobilized to act. However, successful communication of this information requires an understanding of the particular culture's views on health, illness and the individual's responsibility for prevention. Cancer education must be formulated and delivered based on differences of ethnicity, language, religious belief and social experience.

Health and medical professionals working with ethnic groups need a fast, practical, and affordable source to access educational materials culturally and linguistically tailored to specific cultures. After identifying language and culture as the main barriers to communication of health messages to non-English speakers, IHEA developed brochures in 54 languages on breast, cervical, lung, prostate cancers and mammography. All the material is designed to meet each ethnic group's needs and wants. The process of development and evaluation of IHEA educational materials is described here: <http://ihea.info/development>

**#79 (continued)**

The entire library is currently offered for download free of charge on IHEA's website at [www.IHEA.info](http://www.IHEA.info). While the website's purpose is cancer prevention and early detection education for immigrants living in the U.S., it also serves as a unique and valuable resource for users the world over.

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**#80**

**Social Class & Obesity: Indicators of Health Behavior, Predictors of Breast Cancer Incidence**

*Celeste Marie Torio*

**Background:** Combating breast cancer requires consideration of a broad range of factors that encompass social, behavioral, and biological influences. Both health behaviors and breast cancer incidence differ among individuals of varying social class and body size. Women of higher social class engage in healthy behaviors, but have a greater risk of breast cancer. Women of lower social class, however, are often more obese and have a worse prognosis.

**Rationale:** Identifying behaviors and investigating the effect of social class and obesity would aid in the development of effective intervention strategies and further elucidate a causal pathway.

**Purpose of Study:** 1. How do behaviors vary by social class and body size? 2. Do social class and obesity increase breast cancer incidence? 3. Do area-based measures of social class provide further understanding of differences in health behavior and breast cancer incidence?

**Methods:** Data come from the Campaign Against Cancer and Heart Disease (CLUE II) study. This study administered questionnaires to residents of Washington County, Maryland. Participants included in this study were adult Caucasian women. Data analysis includes characteristics of the study participants, logistic regression, survival analysis, and hierarchical regression analyses.

**Results:** At baseline, most participants have a high school education, most have a normal body weight, are married, and live a healthy lifestyle. Two-hundred sixty-two postmenopausal women in this study have had an incidence of breast cancer.

**Implications:** This research will build awareness of the importance of the combined effects of social and physical variables on behavior and breast cancer. This research will also allow for the creation of policies that tackle the structural sources of inequality and promote healthy environments conducive to healthy behaviors for all women.

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**#81**

**Predictors of Cervical Cancer Screening Behavior Among Thai Women in California**

*Jennifer Tsui, Sora Park Tanjasiri*

**Background:** Cervical cancer is the leading form of cancer in Thailand. While the U.S. Thai population has grown 65% in the last decade, there are no published studies on the cervical cancer screening behavior and needs of Thai women living in this country.

**Methods:** In 2003, as part of the REACH 2010 Promoting Access to Health for Southeast Asian and Pacific Islander Women Project, face-to-face surveys were conducted in Northern California among Thai women 18 years and older. The survey focused on the use and adherence to Pap tests (within the last 3 years), as well as demographic characteristics, access to health care variables, enabling factors and knowledge & attitude of cervical cancer and screening. Chi-square and multivariate analyses were conducted using SAS.

**Results:** Among the 322 women who participated in the survey, 26% were never screened and 39% were not screened within the last three years. Having a doctor's recommendation was the strongest predictor for ever receiving a Pap test (OR 7.78, 95%CI 1.71, 35.2) and adherence to Pap testing (OR 4.35, 95%CI 1.55, 12.2). Using mostly or only English, current employment and select knowledge and enabling variables also predicted screening use.

**#81(continued)**

**Conclusions:** The Pap screening rates for Thai women in our sample were lower than national guidelines. Culturally appropriate and geographically proximate interventions should be targeted towards improving access to screening (especially for first-time screeners), promoting culturally appropriate patient-physician interactions that promote screening, deemphasizing sexual activity and increasing knowledge regarding cervical cancer causes for Thai women in the U.S.

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**#82**

**Blood Conservation and Management in the 21<sup>st</sup> Century**

*Jessie Lee Varisco*

Due to shortages of blood, avoidance of infectious disease, reoccurrence of cancer, immunological medical concerns and religious convictions, many patients would prefer to use alternative strategies and techniques to avoid allogeneic (banked) blood. In identifying the reasons behind this request, we singled out an under served community of individuals, who for religious reasons, refuse the transfusion of blood and blood products. In striving to bridge the disparity issue of treatment between those who willingly accept blood transfusions and those who refuse transfusion therapy in regards to their health, care, we implemented a "program" to avoid or at least conserve the use of blood or blood products. The advent of severe "blood shortages" compelled us, as stewards of our resources, to implement conservation strategies and techniques as a standard of care for all patients. The "program" offers solutions in the form of intra-operative equipment, preoperative planning and pharmaceutical products in an effort to either optimize a patient's own internal blood bank or minimize blood loss during surgery. The "program" goals have escalated to find cost effective methods to conserve blood as a precious resource and heighten the awareness of the medical and general community, that blood conservation and management is the best method to approach healthcare in the 21<sup>st</sup> century.

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**#83**

**The Continuum of Cancer Care in Rural Kentucky**

*Regina Rene' Washington, Owen Johnson*

Eliminating health disparities is a national priority (*Healthy People 2010*) which requires policymakers, researchers, health care centers, advocacy organizations and many others to collaborate in leadership through service and resources. However, the health disparities at the national level may not necessarily reflect the health disparities in rural communities; and efforts need to be made to differentiate the rural and urban health disparities. The objective of this project is to focus on the following in rural Kentucky: identify barriers to cancer care screening, and evaluate health care based upon access. The geographical barriers will be explored using spatial analysis of patients' travel distance and time to healthcare services. For the evaluation of healthcare in Kentucky, a comparison of healthcare in rural counties will be contrast with urban counties. Rural, Appalachian populations are least likely to receive healthcare services due to special barriers such as: lack of access to health care, prevention and early detection services; demographic and socio-economic barriers; and cultural barriers to care. Rural populations tend to be older, poorer, less educated, and are more likely to be uninsured. Cancer health disparities significantly exist in Eastern Kentucky, which is one of the poorest regions in Appalachia. This project will explore various factors that explain the health disparities in the continuum of care for cancer (from screening to diagnosis to treatment) that exist in Eastern Kentucky.

#84

**An Examination of cancer centers financial impact on cancer treatment to indigent population**  
*Mustafa Younis*

The current environment of escalating cost of medical care and rising number of uninsured and underinsured. Improving efficiency would give a room for charity and uncompensated care for the indigent population.

**Design Unit of analysis:** Cancer Centers (CC). Cross sectional study for the year 2000 Dependent variables: profit margin Regression analysis and descriptive statistics will be used in this study.

**Results** For- Profit Cancer Center showed more health financial return than Non-Profit centers. The most profitable centers were located in the Western region of the country followed by Northeast, the Midwestern and region and the southern region of United States. Cancer centers with average number of beds equal or below 50 beds were the most profitable in terms of minimizing cost. This indicates that Cancer centers suffer from diseconomy of scale.

**Importance of the Study, Policy implications** The importance of the study stems from the debate over the effect of the healthcare cost on access to healthcare. If profitability is not used to improve the cost of treatment, and the services provided by the Cancer Center, then society might be better off by having a single payer system to pressure for more efficiency and less disparity in the healthcare system. This study must be taken with a grain of salt due to limitations and shortcoming.

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#85

**Comprehensive Cancer Control Plans – Blueprints for Reducing the Burden of Cancer**  
*Sara C. Zeigler, Phyllis Rochester, Christopher N Thomas, Leslie Given*

**Background/Rationale:** Comprehensive Cancer Control (CCC) is a collaborative process through which cancer control partnerships pool resources to promote cancer prevention, improve cancer detection, and increase access to health and social services to reduce the burden of cancer. States, tribes and territories have developed CCC plans to serve as blueprints for coordinated action.

**Methods:** Thirty-one CCC plans were collected for this review. Background information was gathered about the structure and format for each plan. A searchable index of all 31 plans was created using Adobe Acrobat. Plans were searched using a list of key words associated with the following ten topics: coordination with other chronic disease programs, coordination or partnership with various organizations, implementing plans, funding needs and resources, evidence-based interventions, survivorship, disparities, prevention strategies, treatment services, and American Indian health. Review results for 45 CCC plans related to six topic areas are anticipated by March 2006.

**Results:** Cancer plans, developed from 1998 – 2005, greatly varied in length (range= 44-343 pages), organization, and content. Two key findings were that all plans indicate some level of coordination with other chronic disease programs within the context of implementing a CCC plan and address cancer treatment or treatment services

**Conclusions:** Although important insights can be achieved, the variability in the organizing framework of the cancer plans presents a challenge when looking for common content and implementation approaches. The quality of the review relies on the key words selected. The results from this project offer a starting point for understanding CCC plans



## STUDENT POSTERS

#86

### **Antagonism of Crf1 Receptors On Extinction Of Conditioned Fear.**

*Alexis L Alusha, Brandy Nakashima, Lorey K Takahashi*

The neuropeptide corticotropin-releasing factor (CRF) regulates stress-induced endocrine, behavioral, autonomic, immune responses. At least two receptor subtypes known as CRF1 and CRF2 mediate CRF actions. Of particular interest, CRF1 play a major role in facilitating the onset of fear-induced emotional learning and behavior. However, the role of CRF1 receptors in the extinction of learned or conditioned fear is poorly understood. Therefore, we examined the effects of CRF1 receptor antagonism on the extinction of conditioned fear. Rats acquired conditioned fear by placing them in a shock box and after a 2 min period, a total of five electric foot shocks (1s, 1mA) were administered at 2 min intervals. After testing, rats were returned to their home cage. Forty-eight hours after acquisition of conditioned fear, rats were dosed with either the vehicle methocel (N=7) or 10 mg/kg of DMP696 (N=8, 1h pretreatment, PO), a specific CRF1 receptor antagonist, prior to testing for conditioned freezing in the 15 min extinction test when shock was not administered. After testing, rats were returned to their home cage and retested at 48h intervals over the next two extinction trials. On each extinction trial, rats were dosed in the same manner with vehicle or DMP696. Results indicated that rats treated with DMP696 tended to exhibit higher levels of conditioned fear than vehicle-treated rats during the three extinction tests. The data suggest that CRF1 receptors may play a role in an extinction related consolidation process that facilitates the gradual amelioration of conditioned fear.

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#87

### **ROLE OF MONOMER-Dimer Dynamics in Neutrophilic activity of INTERLEUKIN-8**

*Dorian Anderson, Lavanya Rajagopalan, Antonieta Guerrero-Plata, Krishna Rajarathnam and Roberto P. Garofalo*

Interleukin 8 (IL-8) is a proinflammatory chemokine, secreted by macrophages (monocytes) and other lymphocytes. IL-8 is a chemotactic, is produced during infection or tissue injury, and triggers inflammation by attraction neutrophils to injured and/or infected regions. IL-8 exists in a dynamic equilibrium between monomeric and dimeric forms; at low concentrations, it is monomeric and can dimerize at higher concentrations. In the present study, we have used a mouse model of inflammation to understand the relevance of dimerization for neutrophil recruitment. Mice were injected intranasally or intraperitoneally with wild typeIL-8, or an obligate monomeric or dimeric IL-8 variant. At specific time points after inoculation, the mice were sacrificed, and either bronchoe-alveolar lavage or peritoneal fluid was collected to assess numbers of infiltrationg neutrophils. Our results indicate that monomeric interleukin 8 has a slightly lower level of neutrophil activity than the wild type. Surprisingly, on the other hand, dimeric IL-8 was almost completely inactive. It appears that dimer dissociation to monomeric unit is essential during the process of neutrophil recruitment.

Supported by NIH Grant

#88

**Effect of parathion in the proliferation of a human breast cancer cell line**

*Gustavo Armaiz-Pena, Maria A Hernandez-Valero, Nilda Rivera-Del Valle, Lovell A Jones*

Breast cancer is the most common cancer and the second leading cause of death among women. There are multiple risk factors for the development of the disease, including age, genetics, race, drug therapy (i.e. hormonal treatment) and environmental pollutants. Parathion is an organophosphorous pesticide (OP) widely used in the United States in agriculture and for home pest control. Recently, an association was found between parathion and the abnormal progression of epithelial cells in the rat mammary gland. The specific aims of this study was to (1) investigate if parathion could induce progression in a malignant human breast cancer cell line (MCF-7), and (2) compare the growth rates of the MCF-7 cell line to a non cancerous cell line (MCF-12). To determine the effect of parathion in MCF-7 and MCF-12 cell proliferation, cells were treated with 50, 100, 200 and 400 ng/ml of parathion. Cell proliferation was determined by the trypan blue exclusion method. The results indicated parathion was able to induce proliferation in both human cell lines MCF-7 and MCF-12 at every concentration level. The treated MCF-7 cell line demonstrated a major outgrowth at every concentration level compared to the non-treated cell line MCF-12. No changes were observed in the treated and non-treated MCF-12 cell line. In conclusion, this study demonstrated parathion had a direct effect on the proliferation rate of the MCF-7 cell line, but not on the MCF-12 cell line. Future studies should include lower doses (0-40 ng/ml), different compounds (weak or inactive OPs), and additional cell lines without estrogen receptors.

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#89

**2005 Field Survey of Moquito Species in Southside Virginia**

*Carmen Batiste, Nadine Chambers, Carmen Batiste, Alexander Olvido*

Due to their adaptability, mosquitoes (and the parasites that they transmit) have proven difficult to eradicate completely from human settlements. Current efforts, hence, focus attention on more feasible management of mosquito species, including careful surveillance of mosquito populations. In this study, we report preliminary results from an on-going demographic study of mosquito species in the southside area (more specifically, Colonial Heights and Ettrick Village) of Virginia. Specimens were captured with CDC light traps, each supplemented with a 24-hour reservoir of carbon dioxide ("dry ice").

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#90

**Assessing Genomic Instability Using Brewer's Yeast, *Saccharomyces cerevisiae*.**

*Danita R. Davis, Alison Adams*

**Background:** The impact of cancer on American Indians and Alaskan natives of all ages was shown to be the third leading cause of death for these individuals and the second leading cause of death for those individuals over 45 years of age (IHS Pub No. 97-615-23).

**Rational:** Understanding the genetic mechanisms and pathways that relate to an increase in cancer is still very much unexplored and not understood. Cancer is caused by mutations which lead to genomic instability.

**Purpose of Study:** The purpose of this study is to observe genomic instability events in brewer's yeast, *Saccharomyces cerevisiae*. Once an instability event such as over-expression of a gene that leads to mutation is identified it will be analyzed and compared to events that take place in human cells.

## #90 (continued)

**Theoretical Approach:** (not included).

**Methods:** A disomic construct containing four markers, one on each arm of the disomic chromosome will be transformed into yeast cells. The transformed yeast will be encouraged to go through cellular replication and observed for instability events. Genes that are over-expressed cause increased levels of genomic instability. When an instability event occurs it will be detected and analyzed. The four markers will be used to help define what instability events are occurring.

**Results:** Primers have been designed and built to insert one marker URA3 on one arm of the disomic chromosome seven of *Saccharomyces cerevisiae*. Once a suitable construct is built, over-expression and resulting chromosomal breakages that result in mutations that increase genomic instability will be identified and assayed for what actually stabilizes the genome.

**Implications:** Since the yeast genome is defined and the cellular division pathway is highly understood, this model should be easy to manipulate. A variety of biologic techniques are available to identify which over-expressed gene leads to genomic instability in our model and also will help in understanding what genetically defines cancer.

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## #91

### Gateway Cloning of Retinal Development Genes

*Del Fierro Perla, Debra Murray, Yumei Li, Richard Gibbs, George Weinstock, Rui Chen*

Eye development research uses *Drosophila melanogaster* as a model organism because the retinal differentiation (RD) pathway is conserved in *D. melanogaster* and humans. The RD pathway involves a gene called eyeless at the top of the pathway and three downstream genes. My project is to identify other genes in the pathway that are downstream of eyeless and sufficient for RD. First, we selected various genes that were possibly involved in RD. Genes induced by eyeless are identified by comparing wild-type tissue to overexpressing eyeless tissue using microarray analysis. Next, the genes were cloned using gateway system. The DNA was extracted from bacterial colonies, purified, sequenced and amplified using specific primers. The gene was then inserted into a non-transcribable, entry-level vector; thus far, six clones have been made. In the future, the gene will be removed from the entry-level vector and inserted into a vector that can be transcribed. Finally, this vector will be put into a transgenic fly. If an ectopic eye develops, then one can conclude that the gene is involved in and is sufficient for RD. Another project involved mapping a mutation, using SNP's as markers that cause odd-shaped eyes in *D. melanogaster*. The DNA of four mutated strains was amplified with 18 different primers. Once sequenced, SNP's were identified by comparing the DNA sequences among the strains. Six SNP's have been found and currently I am sequencing three more strains.

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## #92

### Synthesis of Microporous Metal-Oxides as Template for Bone Cells

*Windlyne DeLouis, Aderemi Oki*

**Hypothesis:** Formation of bone-like apatite on artificial material is induced by functional groups such as Si-OH, Ti-OH, Zr-OH, Ta-OH. These groups have specific structures and induce apatite formation through the formations of an amorphous such as calcium silicate and calcium titanate. Our hypothesis are: 1) Porosity in mixed metal oxide containing Ti or Si, can be controlled using n-alkylamine template, 2) the higher the carbon chain in the template, the bigger the pore size, 3) For a fixed alkyl chain, moving from primary to secondary amine will lead to increase in pore size distribution from microporous to mesoporous range.

## #92 (continued)

**Experimental Methods:** Porous mixed metal oxides of the type  $TiO_2-SiO_2$  and  $TiO_2-Cr_2O_3$  were synthesized by sol-gel process in propanol-water mixture, using titanium(IV)propoxide, tetraethylorthosilicate and chromium(III) acetate hydroxide as reagents. The pore size was controlled using the following amines as templating agents (n-hexylamine, n-methyl-N-hexyl amine, n-Butyl-n-propylamine, and n-octyldecylamine). The obtained oxides were calcined at 260°C and 450°C and the Fourier Transform Infrared Spectrometer were used in characterization. The surface area and porosity were determined by adsorption and desorption of nitrogen, and BET method.

**Results:** In all of the synthesized metal oxides, calcining at 250°C led to the decomposition of the n-alkyl amines. For cases where the metal acetate is the inorganic source, the material was calcined to 450°C to ensure complete removal of organic content. All of the mixed metal oxides showed pore size ranging from microporous, type I isotherm, (primary alkyl amine template) to mesoporous type IV isotherm (secondary alkylamine as the pore directing template). Increasing the alkyl carbon chain length increases the pore size distribution. Microporosity in these oxides increase with surface area.

**Conclusion:** Mixed metal oxides of the type  $TiO_2-SiO_2$  and  $TiO_2-Cr_2O_3$  of various pore size distributions and surface areas can be synthesized by sol-gel technique using n-alkylamine as template. The pore size distribution in these materials is dependent on the templating agent, the solvent utilized, and it varies from microporous mixed oxides of type I isotherm to mesoporous mixed oxides of type IV isotherm. The degree of microporosity in the structure should promote increased cellular attachment especially in design of tissue engineering scaffold for bone repair.

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## #93

### Cycloaddition Reaction of Furfural and 5-Hydromethylfurfural Nitrile Oxides

Osayamen Edigin, Ananda Amarasekara

Furfural and 5-hydromethylfurfural are renewable resources based specialty chemicals useful as starting compounds in number of chemical industries. These compounds are produced from dehydration of pentoses and hexoses from agricultural wastes like corncobs, cornstalks, wheat, and oat hulls. The aim of this study is to explore the potential of the cycloaddition reaction methods to build complex molecules from furfural and this 5-hydromethyl derivative of furfural.

Nitrile oxides were generated from furfural and 5-hydromethylfurfural oxime using sodium hypochlorite as the oxidant at 0 °C, in aqueous tetrahydrofuran medium. These nitrile oxides were allowed to react with the variety of alkenes and alkynes *instiu*, and the resulting intermolecular 1, 3-dipolar cycloadditions produced substituted furanyl-dihydro-isoxazoles and furanyl-isoxazoles in good yields. Bis-heterocyclic systems prepared are useful in diversity oriented synthesis and as synthones in building more complex heterocyclic systems.

#94

#### **In vitro Evaluation of 111In-DOTA-Anti-BCL-2-PNA-TYR3-Octreotate in Chronic Lymphocytic Leukemia Cells**

*Charles Hunter, Michael L Lewis*

The B-cell lymphoma/leukemia-2 (bcl-2) gene is over expressed in many cancers. This gene increases cell survival by blocking apoptosis, or programmed cell death. The objective of this study was to evaluate radiolabeled peptide nucleic acid (PNA)-peptide conjugates targeting bcl-2 gene expression. DOTA-anti-bcl-2-PNA-Tyr3-octreotate conjugate was labeled with 111In. Uptake, internalization, and efflux studies were performed in the human chronic lymphocytic leukemia (CLL) cell line Mec-1, which expresses both somatostatin receptor and bcl-2 mRNA. In the conjugate, octreotate is the somatostatin receptor ligand. Receptor and nRNA binding were also evaluated. Internalization of 111In-DOTA-anti-bcl-2-PNA-octreotate increased from 58.29% at 1 min to 67.9% at 15 min and reached 81% at 4 h, whereas the internalized 111In-DOTA-anti-bcl-2-PNA-Tyr3-octreotate in Mec-1 cells started from 31.1% at 1 min and gradually increased to 49.28% and 66.1% at 15 min and 4 h, respectively. Efflux analysis of Mec-1-111In-DOTA-anti-bcl-2-PNA-Tyr3-octreotate showed that 84.9% of radioactivity remained in the cells after 1 min incubation and 60.0% of cells associated radioactivity was retained 4h later. Analysis of 111In-DOTA-Tyr3-octreotate showed the cell associated radioactivity dropped from 85.1% at 1 min to 69.1% at 4h. The Western blot assay study showed a 51.0% bcl-2 protein synthesis inhibition by treatment with DOTA-anti-bcl-2-PNA-Tyr3-octreotate. As a result, a peptide conjugate, which contains two molecular functions, was developed. These functions are receptor mediated tumor cell delivery and oncogene mRNA targeting. This agent has the potential to be used for detection of tumor bcl-2 expression by non-invasive molecular imaging.

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#95

#### **White Blood Cell Expression of Transforming Growth Factor-beta Receptors I and II in Ovarian Cancer Survivors**

*Michael Iyamu, Cordella Kelly-Brown, E Gloria C Regisford, Maria Schettino, Richard Hajek*

Ovarian cancer accounts for only about five percent of all cancer in women, but is the leading cause of gynecological cancer death. However, a healthy life style and a high fiber diet have been reported to reduce the risk of ovarian cancer occurrence. Moreover, studies show that ovarian cancer has a direct link with Transforming Growth Factor- beta (TGF-beta), a growth regulator that affects multiple cellular functions through the TGF-beta type I and type II receptors (TGF-beta RI and TGF-beta RII). The purpose of this study was to determine the effect of high fiber diets on the expression of TGF-beta RI and TGF-beta RII on white blood cells. We hypothesized that TGF-beta RI and RII expression will increase with the daily intake of a high fiber diet. Sixteen patients, who had undergone conventional treatment, for ovarian cancer were placed on either (1) an Intervention group-NCI/Juice Plus+ diet (n=9; daily fiber intake=25g) or (2) a Control group-Women's Healthy Eating Living Study (WHEL) diet (n=7; daily fiber intake=30g) for six months. Blood samples were collected at the following time points: 0, 3 and 6 months. The expression levels of TGF-beta RI and TGF-beta RII on white blood cells were determined using Western Blot analysis. We analyzed the expression pattern of TGF-beta RI and RII in patients over time (0, 3, 6 months) in addition to comparing the expression levels between the two diets. Preliminary data suggest that expression of TGF-beta RI appeared to decrease over time in patients who were on the NCI/Juice Plus+ diet, but slightly increased in WHEL patients. The expression of TGF-beta RII increased over time in both groups of patients. Expression levels of both TGF-beta RI and TGF-beta RII were slightly higher in patients on the WHEL diet than patients on the NCI/Juice Plus+ diet. These data suggest that a diet high in fiber may alter the expression pattern of TGF-beta RI and TGF-beta RII on white blood cells and may thus promote the activities of TGF-beta in ovarian cancer survivors.

#96

**Space Radiation and Relative Biological Effectiveness: Assessment of Cancer Risk**  
*Bryon Jennings*

Radiation environment in the low earth orbit and its particle flux transport through space vehicles and ultimately through the human biological systems is much complex [1]. The aspect of space radiation transport not only includes the primary high energetic particles from the free galactic space and also the secondary particles generated in the shielding shell of the space vehicle [2]. Though little, human tissue offers several gradations of self shielding for the radiation environment as a function of the tissue density and depth [3]. We study the measure of relative biological effectiveness (RBE) for the space radiation like particles to assess the damage at the cellular level as a function of linear energy transfer (LET) [4] to assess cancer risk. We expand our cancer risk assessment in particular for skin cancer from space radiation [5]. The implications of these studies are likely to expand our understanding of the increasing number skin cancer incidences rate for general population.

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#97

**The Mechanical Properties of the Elastic Proteins Titin, Fibronectin, and Spectrin Measured by Atomic Force Microscopy**

*Maurice Jules, Andres Oberhauser*

Elastic proteins are essential in the functions of certain parts of the body. For instance, elastic proteins allow our skin and muscles to stretch, flex, and relax. If these proteins were absent, humans and animals alike would be immobile creatures. In this work we focused on titin (found in muscle fibers), fibronectin (component of extracellular matrix), and spectrin (component of the cytoskeleton). These are long proteins made of tandem repeats of different domains. The elasticity of these proteins was tested using single molecule atomic force microscopy. We found that these different proteins have distinct mechanical properties. For example, titin domains unfold at  $\sim$ 150pN, fibronectin domains unfold at  $\sim$ 80pN, and spectrin at  $\sim$ 50pN. Furthermore, there are differences in the increases in contour lengths (DLC) of individual domains upon unfolding. These parameters were analyzed using statistical software (LabView, IGOR) and protein structure visualization tools (VMD). The analysis revealed that these proteins have distinct mechanical topologies, which explains their different mechanical strengths.

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#98

**Role of vanilloid receptors in cannabidiol(CBD)-induced apoptosis in immune cells**

*Brenda Mann, Rupal Ramakrishnan, Prakash Nagarkatti, Mitzi Nagarkatti, Shobha Sriharan*

The marijuana plant (*Cannabis sativa*) has been used to alleviate pain and symptoms associated with several diseases. Among the most abundant chemicals isolated from the plant are the psychoactive ingredient delta-9-tetrahydrocannabinol (THC) and the non- psychoactive cannabidiol (CBD). CBD has been reported to have many therapeutic uses in various animal models of autoimmune diseases. However, the precise mode of action of CBD is not known. The receptor studies carried out here using knockout (KO) mice provide an insight into the receptor associated with the mode of action of CBD. Apoptosis is one of the mechanisms by which CBD modulates the immune system. To study the action of CBD *in vitro*, single cell suspension of splenocytes from C57BL/6 wild-type and vanilloid receptor (VR) knock out (-/-) mice were cultured with 5 and 10uM CBD. THC-10uM was used as a positive control. The cells were incubated for 24h after which they were washed fixed, permeabilized and labeled with the TUNEL reagent. TUNEL assay was used to quantify the percentage of cells undergoing apoptosis. The cells were acquired on a flow cytometer. We found that upon CBD treatment, the cells from wild-type mice underwent apoptosis in a dose-dependent manner. Interestingly, the cells from VR-1KO mice failed to undergo apoptosis, suggesting that the absence of the VR1 receptor renders the cells resistant to CBD-induced apoptosis. This study emphasizes the importance of VR1 receptor in CBD-mediated apoptosis of immune cells. The current study also suggests that agents that bind and activate VR1 receptor can be used as immunosuppressive agents in the treatment of autoimmune and other inflammatory diseases.

#99

### **Classification of the Severity of Liver Disorder using the Random Forest Algorithm**

*Rachelle Mathis, Johnson Wetiba*

Data mining techniques have become more popular in many areas of science, finance and industry. For instance, they have been used to predict whether a patient hospitalized due to a given health condition will get better or worse on the basis of demographics; predict the price of a stock several months in advance on the basis of company performance measures and economic data; to identify the numbers in a handwritten ZIP code from a digitized image; identify the risk factors for prostate cancer based on clinical and demographic variables etc. Data mining techniques are very useful on large data sets and flexible also. This research describes the utilization of the Random Forest algorithm on the Bupa Liver Data with an objective of predicting the severity of liver disease from several blood tests and the amount of alcohol drunk, in half-pint quantities. On the training data set the overall misclassification error is 31% (29% on the less severe class and 33% on the severe class). The test error is about 39%. KEY WORDS: Binary Tree Classifier, Bagging, Gini Index, Misclassification error, Out-of-bag (OOB) data, Variable Importance, Random Forest, Proximity, Margin

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#100

### **Effect of Oversulfation on Anticoagulant Properties of Polysaccharide Fucoidan**

*Geoffrey Mbah, Vassant Doctor*

The native sulfated polysaccharides from *fucus vesiculosus* (fucoidan) was separated to obtain molecular weight range between 30 and 100 using the ultra-filtration method. About 0.9g of the low molecular weight fraction was purified and sulfated using di-aminoethylaminothyl (DEAE) cellulose chromatography and chlorosulfonic acid pyridine complex method respectively. Agarose gel electrophoretic analysis was also carried out and a single band was observed indicating that the purified compound was homogenous. Some earlier studies on sulfation techniques reported low yield in sulfated polysaccharide. However this study have followed strictly the various steps in the sulfation procedure and have been able to show that sulfation can be achieved effectively. An assessment of the anticoagulant activities of sulfated polysaccharide fucoidan was carried out using prothrombin time test. The sulfated compound showed three-fold higher anticoagulant activities in doubling prothrombin time in comparison with native or unsulfated fucoidan. This enhanced activity is consistent with different concentrations of both native and sulfated fucoidan.

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#101

### **Polymorphisms of the ATP1A2 Gene: A Genetic Substrate for Racial Differences in Susceptibility to Hypertension**

*Nicole Milton, Phakre Tushar, Michael Smith*

Hypertension, more commonly known as high blood pressure, has been known to abnormally affect the African American community. People with hypertension are inclined to have an exaggerated sympathetic nerve activity and blood pressure responses to cold stimulus. Also, sleep apnea patients, who have a high incidence of hypertension, have exaggerated sympathetic nerve activity and blood pressure responses to apnea (a breath hold). A recent pilot study suggested that there is a genetic link between a 3' polymorphism of the ATP1A2 gene, found more prevalently in African Americans, and a high incidence of hypertension. The objective of this study was to test the hypothesis that people with the polymorphism on the ATP1A2 gene will have abnormal blood pressure control, as shown by exaggerated pressor responses. The methodology employed in this study involved a procedure for genetic profiling of the subjects and a separate procedure for measuring sympathetic nerve activity and blood pressure responses to different temperatures of cold water and to hypoxic apnea. The genetic procedure involved the following: blood collection of each subject, DNA extraction from white blood cells, DNA digestion with Bgl II restriction enzyme, DNA precipitation, separation by electrophoresis and transfer to nylon membranes, hybridization with biotinylated genomic DNA probe specific for the  $\alpha 2$  gene, and development of bioradiograms after five to ten days of exposure. The physiological procedure involved: breathing in through hypoxic bags for one minute with 12%, 16%, and 21% oxygen concentrations

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**#101 (continued)**

followed by a twenty-second breath hold, and a cold stimuli of 2°C, 10°C, and 18°C followed by a fifteen-minute recovery period. During the physiological procedure there was constant measurement of blood pressure, sympathetic nerve activity, respiration, and an electrocardiogram. The preliminary results of this study show that there is graded response in increases in blood pressure due to cold stimulus, and to hypoxic apnea. At lower temperatures and lower oxygen concentrations there was an increase in blood pressure. Given the Hypothesis, it is anticipated that people with polymorphism will have abnormal blood pressure control, shown by exaggerated pressor responses, as compared to people without the polymorphism.

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**#102****Effects of a High Soy Diet on Serum Levels of Genistein and Testosterone in Prostate Cancer Survivors**

*Beatrice Ndonye, Maria Schettino, Richard Babaian, E Gloria C Regisford, Richard Hajek*

Prostate cancer is the third most common malignancy in men in the world and the second-leading cause of cancer-related deaths in men in the United States. Its actual cause remains unknown and there is no effective cure when it metastasizes and becomes resistant to conventional treatments. Epidemiological data suggests that dietary factors play a significant role in the incidence and recurrence of prostate cancer. A diet high in soy products has been reported to lower the risk of prostate cancer and this effect has been attributed to Genistein, a major soy isoflavone. The objective of this study was to determine serum levels of genistein and testosterone in prostate cancer survivors who were placed on a high soy diet. We hypothesized that testosterone and Prostate Specific Antigen (PSA) levels would decrease as genistein levels increased through dietary intake of soy products. Eighteen prostate cancer survivors were randomly assigned to either (1) a control diet or (2) a high soy diet. Serum samples were collected from all participants at baseline, four, seven and twelve months. Genistein levels were measured using a Time Resolved Fluorescent Immunoassay (TR-FIA) and levels of testosterone were measured using an Enzyme Linked Immunosorbant Assay (ELISA). Serum levels of genistein significantly increased over time in patients on the high soy diet compared to patients on the control diet. There was no significant difference in testosterone levels between the two groups of patients over the duration of treatment. However, PSA levels were significantly lower in the intervention group than in patients in the control group. These data strongly suggest that diets high in soy will decrease PSA levels without affecting testosterone levels and hence decrease the risk of prostate cancer recurrence.

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**#103****The Role of Caveolin in Ion Channel Metabolism**

*Josiah Onyenekwe, Florence Okonkwo, Matteo Vatta, Jeffery Towbin*

A major cause of death in the 21st century is Arrhythmia caused from a majority of myocardial structural diseases. LQT and Brugada are types of primary arrhythmias caused by mutations altering ion channels function and metabolism. Heart muscle cells express SCN5A, NCX, and L-type-Ca<sup>2+</sup> ion channels that in striated muscle are associated with the cytoskeleton protein caveolin. Caveolin is a protein incriminated in lipid transport and signal transduction. Three main caveolin genes have been identified to code for caveolin-1, -2, and -3 respectively. CAV3 (caveolin-3), which is mainly expressed in striated muscle, has been previously involved in cardiomyopathies and muscular dystrophies when mutated. We investigated the mechanism of CAV3 mutations in C2C12 murine skeletal myoblast transfected cells. The wild type (wt) and mutant CAV3 coding sequence have been previously cloned as fusion protein with the green fluorescent protein (GFP) in N-terminus GFP TOPO mammalian expression vectors. The expression of the wt and mutant CAV3 was investigated by immunohistochemistry using the natural fluorescence of GFP. This technique was used to identify the localization of wt and mutant CAV3. In addition, PCR (polymerase chain reaction) was used to amplify CAV3 coding sequence and screen 53 patients with left ventricular noncompaction (LVNC) and determine their susceptibility to arrhythmia when mutant CAV3 is present. It was found that mutated and wild type CAV3 did not have significant difference in their localization in C2C12 cells. Alternative mechanism other than Caveolin 3 altered localization is suspected to be involved in the susceptibility of secondary arrhythmia.

**#104**

**The Effect of Egg Placement on Embryonic Development**

*Xochyl Ortiz, Victor Stanley*

The mystery surrounding the formation and development of humans has been clarified by observing the embryonic development of the chick. There are reasons why some eggs do not hatch, just like some pregnancies that fail to mature. The objective of this study was to determine the effect of the position of eggs during incubation on embryonic growth and development. It was hypothesized that the placement of the eggs during incubation had no effect on the embryonic development. Thirty eggs were placed in the normal position for control (large end up) and another thirty were placed with the small end up. The incubation period was 21 days. The data collected from this experiment was gathered on a timely manner. Every sixth day the eggs were candled to check growth and development of the embryo, and to record early embryonic death. The difference in moisture lost (weight lost), which was insignificant, was recorded to determine its effects on embryonic death. The results showed that the eggs that were placed with the small end up had a higher embryonic mortality (73.3%) compared to the large end up of 6.6%. The hatchability rate for the group with the large end up was 96.5% compared to 26.6% for the group with the small end up. Therefore, the data indicate that egg placement during incubation has an important effect on embryonic growth and development.

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**#105**

**Enzymatic Degradation Of Chitosan**

*Steve Ovu, Cordella Kelly-Brown, Laura Carson*

Research in biodegradable polymers has received great attention in the past twenty years because of the widespread application in the environment, clinical medicine, food, pharmaceuticals and cosmetics. Biodegradable polymers are macromolecules that have the ability to breakdown safely and relatively quickly into raw materials of nature and disappear into the environment. Chitosan is a biodegradable polymer that is the deacetylated product of chitin. Chitosan has been studied due to its' unique properties, biocompatibility and biodegradability. For example, investigators have studied the degradation of chitosan using a commercial enzyme. They were able to show that the molecular weight was decreased and the structure of the residues was unchanged while the water solubility was increased. In the present study, high molecular weight chitosan (HMWC 3.0 g) was reacted with bacterial protease (0.2g) to yield low molecular weight of each fraction was determined using viscosity measurements. The molecular weight for each fraction was 200,000, 78,000 and 61,000 for 1, 2 and 3 hours, respectively. Thermogravimetric data indicated that the 20% weight loss temperature for fraction 1 and 2 are 282°C and 243°C. Proton Nuclear Magnetic Resonance (1H-NMR) spectroscopy was performed to determine if percent deacetylation changed with molecular weight. Initial studies indicated that the integration for virgin chitosan, fraction 1 and fraction 2 were the same.

#106

**The Antiprotozoan Effects of Diospyrin, a Phytochemical, on the Development of Trypanosoma musculi in Fawn (FN) Male Mice (Part II)**

*Ashley Owen, Arnab Paul, Phylis Wilson, Dilip Sen, Shobha Sriharan*

In the present investigation, the effects of the test compound, Diospyrin, on the development of *Trypanosoma musculi* was observed in Fawn (FN) male mice. The LD50 of the test compound was determined. The phytochemical was isolated from the stem-bark of an indigenous plant, *Diospyros montana* Roxb.

A dose of inoculum of 250 g of a bisnaphthoquinonoid compound, Diospyrin, was found to show antiprotozoan activity *in vivo*. The result of our study indicated that the phytochemical, Diospyrin, administered simultaneously with a standard inoculum of  $5 \times 10^4$  T. *musculi*, affected the parasitemic level in the experimental animals when compared with the infected but untreated controls. The infection was measured by the number of hemoflagellates at the peak and throughout the course of the patent period (7 to 17 Post Inoculation days).

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#107

**Extracellular Domain Nicotinic Acetylcholine Receptors Formed By alpha4beta2 Subunits**

*Aurelia Reynolds, Alexandria Person, Gregg Wells*

Drug addiction, alcoholism, Alzheimer's disease, genetic forms of epilepsy, schizophrenia and depression are involved in neurological diseases. The disease this lab is focused on is Addiction. Addiction is a behavioral syndrome where drug procurement and use seem to dominate an individual's motivation and normal constraints on behavior. The above diseases have neurological problems with the neuron receptors. The object of the lab is to get alpha4beta2 nAChRs; obtain its full structural model length without the first transmembrane domain (M1) which are expressed in *Xenopus* oocytes and to alpha4beta2 nAChRs which are ligand-gated ion channels expressed mainly in the nervous system and at the neuromuscular junction. Also the lab's focus is on the study of the structure and dynamics of nAChRs and to find out what in M1 causes the structure to be stable. In order to achieve results we came up with the following questions: 1. How can water soluble extracellular domain nicotinoid receptors be produced? Is M1 important? a. Produced without transmembrane domains? b. Indirectly through membrane-tethered intermediate? Which route works? 2. Testing the effect of M1 on expression of extracellular domain alpha4beta2 receptors in oocytes. The human  $\alpha 4\beta 1$  subunit design contains M1, the first transmembrane domain. The alpha4WS design tests a direct route to water-soluble extracellular domain alpha4beta2 nAChRs. 3. Binding of ligands to extracellular domain alpha4M1/ beta2M1 nAChRs. High Affinity binding by alpha4M1/ beta2M1 nAChR around the binding site. 4. Expression of a alpha4WS and beta2WS subunits but no extracellular domain nAChRs: M1 is needed alpha4WS and beta2WS subunits are expressed and glycosylated, but no binding of [3H] epibatidine is detected. The results realized that M1 is required for efficient expression of extracellular domain alpha4beta2 nAChRs. Extracellular domain alpha4 and beta2 subunits without M1 produce no detectable extracellular domain nAChRs. Questions waiting to be answered: How can Addiction be prevented and what would the treatment be? What is the number of receptors in addiction to take on a certain shape? What are all of the proteins that exist and how do they relate together? Question at thought: If we could control the formation of the receptors then maybe we could change the way that an addiction attacks the neurological order of the brain?

**#108**

**Proteolytic Processing Of Aplysia Precursor Egg Laying Hormone By Furin**

*Jessica Small, Xiao Lian Liang, Bo Xu, and Alexander Kurosky*

The egg-laying hormone (ELH) of Aplysia is a thirty-six amino acid peptide that is proteolytically processed from a larger precursor of 271 amino acids (preproELH) largely by prohormone convertases (PC's) at multiple basic residue sites. Cleavage at the tetrabasic site (RKRR) at residue 186 is thought to be the initial processing event after removal of the signal peptide. Since this tetrabasic site is a typical furin specificity site we investigated the cleavage of preproELH with commercially available human furin. Highly purified preproELH was obtained after bacterial expression in *E. coli*. It displayed no egg-laying activity. A major goal of this study was to investigate the processing of preproELH by furin with the hope of obtaining limited proteolytic fragments that would be amendable to structural analysis by either NMR or X-ray crystallography. Cleavage experiments were conducted to optimize the digestion reactions conditions by varying reaction buffers, pH, detergents, and hydrolysis time. Furin digestion reactions were evaluated by one-dimensional SDS-PAGE and by matrix assisted laser desorption/ ionization (MALDI) time-of-flight (TOF) mass spectrometry (MS). Results obtained demonstrated that furin cleaved primarily at residue 186 of the tetrabasic site and secondarily, to a lesser extent, at Arg-163 of a tribasic site. MALDI mass analysis of the furin generated fragment that added up almost precisely to the mass determined from intact preproELH by electrospray MS (28,085.7+ 3.0). These results are the first demonstrated of the direct action of a furin on the Aplysia precursor egg-laying hormone and strongly suggest that Aplysia furin likely cleaves in a similar manner.

Supported by NIH

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**#109**

**Factors Affecting Post Operative Ambulation Among Adult Patients**

*Branden Donell Taylor, Suzanne Couture, Mabel Caban*

The purpose of the study is to identify factors that encourage early ambulation among adult patients who underwent orthopedic, renal transplant, and gastrointestinal surgeries. A descriptive study design will be employed to describe the nature of the nursing interventions received by patients and the degree of importance of these interventions as they affect the ability and/or willingness of the patients to engage in early post-operative ambulation. Aims of the study include 1) Describe perceptions of patients regarding nursing interventions related to early ambulation, 2) Identify factors that encouraged early ambulation in the group of selected subjects, 3) Develop a model of early ambulation as a standard of nursing care in post-operative patients. Methods of data management and analysis include descriptive statistics in the form of frequency distributions and percentages. The narrative interview data will be analyzed using content analysis.

#110

### **High Fiber Diets and Transforming Growth Factor- $\alpha$ in Ovarian Cancer Survivors**

*Brenda I Villafranco, Maria Schettino, Richard Hajek, E Gloria C Regisford, Cordella Kelly-Brown*

Ovarian cancer has the highest mortality rate among gynecological malignancy in developed countries. If detected early, the five year survival rate is 90%, but the risk of recurrence within that period is over 50%. Moreover, most cases are detected in the late stages after metastasis has already occurred beyond the ovaries. Numerous reports have indicated that diet can affect the risk of ovarian cancer incidence and recurrence. Other factors, such as the cytokine family of Transforming Growth Factor- $\alpha$  (TGF- $\alpha$ ), have been reported to play conflicting roles in ovarian cancer cell growth. The objectives of this study were to evaluate the effect of high fiber diets on serum levels of TGF- $\alpha$ 1&2 and to correlate these findings with serum CA-125 levels in ovarian cancer survivors who were in remission. We hypothesized that the high fiber diets will increase serum TGF- $\alpha$  levels with a correlative decrease in CA-125 serum levels. Sixteen ovarian cancer patients who had undergone conventional cancer treatment were assigned to either (1) an Intervention group-NCI/Juice Plus+ diet (n=9; daily fiber intake=25g) or (2) a Control group- Women's Healthy Eating Living Study (WHEL) diet (n=7; daily fiber intake=30g) for six months. Blood samples were collected at 0, 3 and 6 month time points. The levels of serum TGF- $\alpha$ 1&2 were determined using an enzyme linked immunosorbant assay (ELISA). Serum levels of TGF- $\alpha$ 2 increased over time in both groups of women, although a greater increase was observed in women on the WHEL diet. Serum levels of TGF- $\alpha$ 1 increased slightly in both groups. There was a negative correlation between serum levels of TGF- $\alpha$ 1 and CA-125 in WHEL diet patients, but CA-125 levels remained constant as TGF- $\alpha$ 1 levels increased in NCI/Juice Plus+ patients. Alternatively, there was an apparent weak positive correlation between serum TGF- $\alpha$ 2 and CA-125 levels in NCI/Juice Plus+ patients, while a weak negative correlation was observed in patients on the WHEL diet. The mechanism of interaction between high fiber diets and TGF- $\alpha$  is unknown. However, these data suggest that high fiber diets may promote the antiproliferative effects of this family of cytokines, decreasing CA-125 serum levels and possibly leading to a decreased risk of ovarian cancer recurrence.

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#111

### **Genomic Signal Processing**

*Shevis D. Wimbush, Ehsan Sheybani, Shobha Sriharan*

Recent methods facilitate large-scale surveys of gene and protein expression in which transcript levels can be determined for thousands of genes simultaneously. In particular, expression microarrays result from a biochemical-optical system incorporating robotic spotting and computer image formation and analysis. Analytical tools are required to detect and model the decision-making processes of genetic networks. Owing to the major role played in genomics by transcriptional signaling and the related pathway modeling, it is only natural that the theory of signal processing should be utilized in both structural and functional understanding. In particular, Genomic Signal Processing (GSP) aims to integrate the theory and methods of signal processing with the global understanding of functional genomics, with special emphasis on genomic regulation. Since genes execute their functions via both transcription and translation (protein formation), a comprehensive understanding of how the genome controls the development and functioning of cells requires the study of both genomics and proteomics. This presentation is aimed at applying signal processing methods in the area of systems biology relating to genomics and proteomics. While this certainly includes GSP, it also includes processing genomic signals and extends to applications related to genomics and proteomics. The goal is to provide a broad overview of a genomic or proteomic problem raising interesting questions to the signal processing community.

#112

**Chitosan Effects On Ovarian Cancer Cell Lines: Sk-Ov3**

*Ayana Young, Theresa Okeyo-Owuor, Laura Carson, E Gloria C Regisford*

Given the moniker the "Silent Killer" because of its difficulty in detection, ovarian cancer is the leading cause of gynecological cancer deaths in women. If caught in the early stages, five year survival rates can be as high as 90%. However, there are no known methods to detect ovarian cancer in its early stages. Most cases are detected in the late stages when the cancer has already metastasized beyond the ovaries into neighboring tissues and organs making it difficult to treat. Patients with advanced stage ovarian cancer are normally treated with cytoreductive surgery followed by a combination of chemotherapy and radiation. Nevertheless, nearly 85% of these women ultimately relapse. Alternatives to current treatment can be used without the devastating effects of partial or full hysterectomy, as in the case of younger women of childbearing age. Chitosan, a derivative of chitin, has previously been shown to drastically decrease cell proliferation. Therefore, can ovarian cancer patients be effectively treated with more natural products such as chitosan? The objective of this study was to determine the effects of chitosan treatment on SK-OV-3 cells, a highly aggressive epithelial ovarian cancer cell line. We hypothesized that chitosan will decrease SK-OV-3 cell growth and change their morphology in a dose-dependent manner. Cells (10,000/ml) were cultured in 25 cm<sup>2</sup>, allowed to attach for 24 hours and then treated over a period of four days with 0, 100, 250 and 500 µg/ml of chitosan (n=3 per treatment). Changes in proliferation and morphology were observed using hematoxin staining. A significant decrease in proliferation was observed in all chitosan treated cells. The decreased rate of proliferation was dose-dependent, with the 500 µg/ml treatment having the greatest decrease in growth relative to control. Major differences in morphology were also observed in chitosan-treated cells compared to control. Therefore, chitosan treatment decreases SK-OV-3 cell proliferation and causes major morphological changes. Chitosan may thus be a natural product alternative treatment for ovarian cancer.



## Student Orals

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Thursday, April 20, 2006

4:45 PM – 6:00 PM

Congressional A

4:45 PM Abstract #113

Positive Surgical Margins Association with Prostate Cancer Reoccurrence

*Sheree Boykin*

5:00 PM Abstract #114

The Association of Race on Prostatic Specific Antigen (PSA) Velocity and PSA Doubling Time  
Prior and Post Radical Prostatectomy

*Phylica Echols*

5:15 PM Abstract #116

The Epidemiology of Prostatic Biopsies and Prostate Cancer Detection

*Taylor Ferguson*

5:30 PM Abstract #119

The quality of life after a prostatectomy

*Keesha Moore, Phylicia Echols, Marva Mizell Price*

5:45 PM Abstract #120

Vitamin E Succinate Induces Apoptosis in MDA-MB 231 Breast Cancer Cells

*Sylvester Osayi, Dorrelyn Patacsil, Deepak Kumar*

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Thursday, April 20, 2006

4:45 PM – 6:00 PM

Congressional B

4:45 PM Abstract #115

Ligand-Independent Preformation of EGFR Homodimers Visualized Utilizing Flow Cytometric  
FRET Techniques

*Demetra Dannielle Farley*

5:00 PM Abstract #117

Genetics, Age, Race, Body Size, and Insulin Growth Factors: How Do They Relate to Prostate  
Cancer?

*Princess Killen*

5:15 PM Abstract #118

African American Faith Communities as Points of Entry for Cancer Prevention: A  
Phenomenological Assessment of Cultural Health Initiatives

*Maddox Nicole, LaTrese Evette Adkins*

5:30 PM Abstract #121

Evaluating the role of Sialic Acid as a Potential Receptor for Foamy Viruses

*Lovelyn Romero, Dr. Neil Josephson, Angela Epp*

5:45 PM Abstract #122

“Development of an Approach to Improve the Efficacy of a Bystander Cell Based Tumor Vaccine”

*Glenn Simmons, Terri Hunter, Sophie Dessureault, Scott Antonia*



## Student Orals

**#113**

### **Positive Surgical Margins Association with Prostate Cancer Reoccurrence**

*Sheree Boykin*

**Background:** Previous studies of surgical management in prostate cancer have found that “surgical margin status is an independent predictor of prostate specific antigen (PSA) recurrence and secondary cancer treatment in patients.” Few studies have examined the relationship between recurrence and race of the patient.

**Rationale:** The purpose of this study was to find how a positive surgical margin is associated with prostate reoccurrence in different races and age groups. We were particularly interested in prostate cancer recurrence in African Americans. If there is a difference, surgical timing and approaches might be examined differently.

**Purpose:** African Americans above the age of 60 often are more likely to have a PSA value of greater than 0.2 after surgery. 0.2 was used in this study as a reoccurrence indicator. PSA recurrence was defined as PSA 0.2 or greater on 2 consecutive occasions after radical prostatectomy.

**Methods:** The data of about 300 men who had a biopsy or a prostatectomy between 1997 and 2005 was used. These reports contained the patient's age, race, PSA values, surgical margins, and surgical data. The men were between the ages of 48-80, and consisted of African Americans, Caucasians, Asians, American Indians, Pacific Islanders, and Unknown. The data was collected and entered into Dr. Sun's database. The data was then analyzed in Microsoft access and excel.

**Results:** There was not enough significance in the findings to show a definite association between surgical margin status as an independent predictor of prostate specific antigen (PSA) rise to predict recurrence. The p value was .309.

**Implications:** The findings support that African American men between the ages of 50 to 60 were more likely to have a reoccurrence but the findings did not have significance. Further study needs to compare the positive surgical margins, T stage, and PSA values.

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**#114**

### **The Association of Race on Prostatic Specific Antigen (PSA) Velocity and PSA Doubling Time Prior and Post Radical Prostatectomy**

*Phylipa Echols*

**Background:** African American men are known to have earlier onset of prostate cancer (Pca), higher PSA values at diagnosis, and more advanced presentations of prostate cancer. Research has identified elevated prostate-specific antigen (PSA) levels and rates of change in PSA levels between consecutive visits as early clinical markers for Pca development. A PSAV higher than 0.75 ng/ml/yr is associated with a higher probability of Pca development; secondly, a PSAD less than 12 years is also predictive of increased risk for Pca development.

**Rationale:** Knowledge of rate of change of the PSA is valuable for clinicians and advanced practice nurses to appropriately counsel their patients on the frequency of routine screening for Pca, and implications for the test results.

**Purpose:** To understand more reliable screening predictors for prostate cancer

**#114 (continued)**

**Methods:** My data set included pathology results from biopsies of 357 men suspicious for Pca who had undergone radical prostatectomy. Exclusion criteria were determined with a resultant sample of 149. This included 118 Caucasians, 20 African Americans, 1 Asian, 1 American Indian, and 9 race unknown. All of the biopsy procedures were done between 1997 and 2005 at Duke University Medical Center in Durham, North Carolina. Records from the Microsoft Access data base were accessed using the Duke University eBrowser.

**Results:** Caucasian patients had a higher average PSAV (27.67 ng/ml/yr) before surgery. African American men had a higher average PSAV (1767.89 ng/ml/yr) post surgery. Caucasian men had a lower average PSAD (0.94) before surgery and the African Americans had a lower average PSAD (0.52) post surgery. Data analysis found that a higher PSAV or lower PSAD are indicators of a higher mortality rate or lower chance of surviving Pca. African American men had a higher PSAV prior to the radical prostatectomy but ended up having the lower PSAD afterwards.

**Implications:** PSAV and PSAD should be watch more carefully by clinicians for early informed discussions about prostate cancer screening, especially among African American men.

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**#115**

**Ligand-Independent Preformation of EGFR Homodimers Visualized Utilizing Flow Cytometric FRET Techniques**

*Demetra Danielle Farley*

The growth factor-induced epidermal growth factor receptor (EGFR) signal transduction pathway, which promotes proliferation and differentiation in cells of varying lineage [1,2], requires for its commencement the homodimerization of EGF receptor monomers. While dimeric association of EGF receptors is primarily invoked through ligand binding, recent studies elucidate that pre-formed EGFR homodimers innately exist at the cell surface independent of activation by ligand. Here, corroboration of this finding was achieved by illustrating, via flow cytometric fluorescence resonance energy transfer (FCET-FRET), the presence of EGFR homodimers on the surface of 184A1 cells prior to epidermal growth factor (EGF) stimulation. Analysis of the molecular interactions occurring between EGF receptors before introduction of growth factor involved the fusion of EGFRs to the fluorescent labels Alexa Fluor 488 (A488) and Alexa Fluor 546 (A546) using antibodies to the ectodomains of EGFR proteins. Based on FRET theory, it was anticipated that marked energy transfer, or indirect stimulation of the acceptor molecule via donor excitation and quenching, would occur between A488 and A546 only if the fluorescently-tagged EGF receptors were less than ten nanometers apart, a distance relatively suggestive of direct intermolecular activity. Upon excitation of dually-stained EGFRs, both a slight decline in A488 emission and a considerable enhancement in A546 fluorescence were visualized, substantiating the presence of FRET in the system prior to the addition of epidermal growth factor. Perceivably, a significant proportion of pre-formed EGFR homodimers must inherently exist at the surface of cells independent of activation by ligand. While the incidence of ligand-independent EGFR homodimerization has adequately been validated, the function of pre-formed EGF receptor dimers in the overall mechanism of EGFR activity remains uncertain.

**#116****The Epidemiology of Prostatic Biopsies and Prostate Cancer Detection***Taylor Ferguson*

**Background:** It is a well known that African American men are at higher risk for prostate cancer than any other ethnic group. Recognizing that there is controversy by various health care organizations, there are studies that support African American men getting tested for prostate cancer at an earlier age, 40, than most ethnic groups. Suspected risk factors for prostate cancer include age, income, educational status, knowledge of prostate cancer, marital status, and even social status. These risk factors may be involved in the detection and prevention of prostate cancer.

**Purpose:** The purpose of this research is to determine which specific race and age group has a higher incidence of prostate cancer detection on the first biopsy.

**Methods:** My data set included pathology results from biopsies of 339 men of different races and ages. Patients were excluded if their age or race was unknown. All of the biopsy procedures were done between 1997 and 2005 at Duke University Medical Center in Durham, North Carolina. Records from the Microsoft Access data base were access using the Duke University eBrowser to access my mentor, Dr. Leon Sun's prostate cancer database. Microsoft Excel was used to analyze my data.

**Results:** My results show that there were 16 Caucasian men and 14 African American who were diagnosed with prostate cancer after their first biopsy. During my research, I found that among Caucasian patients who were between the ages of 50 to 70 there was a higher incidence of prostate cancer detected on the first biopsy.

**Implications:** In conclusion, my research showed that among Caucasian men in the database, more men between the ages of 60 and 70 had their prostate cancer detected after the first biopsy. This research will lead to knowledge about racial and age groups differences and early identification of prostate cancer by biopsy.

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**#117****Genetics, Age, Race, Body Size, and Insulin Growth Factors: How Do They Relate to Prostate Cancer?***Princess Killen*

**Background:** Prostate cancer (Pca) causes more than 40,000 deaths annually, with excess deaths among African American men. Risk factors linked to the development of Pca include genetics, body size, race, and age. The biological plausibility is less well understood.

**Rationale:** Defining how circulating levels of IGF-1 and IGFBP-3 might be contributing to the pathogenesis of Pca as one of the possible pathway through which known risk factors affect Pca need further investigation.

**Purpose:** The purpose of this literature review was to examine current and recent scientific literature which has examined the Pca and IGF relationship. **Methods:** A comprehensive literature search was conducted to identify epidemiologic studies that examined genetics, age, race, and body size in relation to IGF-1 and IGFBP-3. A computerized search of human studies and English language publications was performed through June 2005 using Ovid and Pub-Med online databases as well as manual searches.

**Results:** 11 out of 16 articles showed an association between genetics, age, race, or body size and levels of IGFs. It is known that the levels of IGF-1 can influence anti-apoptosis and cell proliferation. If there is an increase in the activity of either of these processes it could be harmful. If this is true then IGF may be a pathway through which these risk factors leads to Pca.

**#117 (continued)**

**Implications:** These findings suggest that polymorphism in growth related genes, older age, black race, and larger body size may be associated with the development of Pca. These analyses require confirmation in larger study population. The rate of Pca may decrease with interventions based on understanding of the IGF relationship to Pca development employed in the clinical setting.

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**#118**

**African American Faith Communities as Points of Entry for Cancer Prevention: A Phenomenological Assessment of Cultural Health Initiatives**

*Maddox Nicole, LaTrese Evette Adkins*

Some major barriers to cancer prevention among African Americans in urban settings have included consistent access to and dissemination of current research. However, community psychologists, health practitioners, and social workers have identified the Black church as a community-based institution through which prevention information and health initiatives could be done. Yet, discussions of necessary behavioral modifications among urban African American populations suggest that public health organizations are not always successful in their overtures. This poster evaluates the struggles and limitations of cultural health initiatives in delivering cancer research and prevention information to Black communities in U.S. cities. The authors' preliminary findings indicate that public health organizations, particularly cancer prevention groups, must incorporate more consideration of cultural cues relevant to the world view and belief systems of this historically important and visible African American institution. Therefore, this poster provides a phenomenological evaluation of pertinent cultural practices prevalent in some African American faith communities. The authors offer a conceptualization of these phenomenological considerations as a model for improving cultural health initiatives regarding cancer research and prevention.

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**#119**

**The quality of life after a prostatectomy**

*Keesha Moore, Phylicia Echols, Marva Mizell Price*

**Background:** Being diagnosed with prostate cancer and undergoing a prostatectomy can present physical and emotional turmoil on a patient and his family. After a prostatectomy there are many complications that may arise with cancer treatment; incontinence, erectile dysfunction, and a rising PSA.

**Rationale:** Understanding the prostatectomy complications and how the surgical procedure can affect an individual and his family's quality of life, can lead to improved anticipatory guidance and expectations following the procedure.

**Purpose:** The purpose of this qualitative exploration was to promote discussion and identification of the symptoms and side effects experienced following a prostatectomy. In this pilot study, 10 patients who had undergone a radical prostatectomy at Duke University Medical Center were sent a five-question survey.

#119 (continued)

**Method:** I spent a 10-week mentorship shadowing my physician mentor in the urology clinic. A large number of patients in the clinic had undergone a prostatectomy following a diagnosis of prostate cancer. I developed a brief questionnaire using topic areas expressed in the follow up visit as common day-to-day complications and problems after a prostatectomy. The survey addressed issues most often faced by patients who have undergone a prostatectomy. The survey was randomly given during clinic sessions in one week to seven of 10 men who consented to complete the survey. The survey was analyzed exploring predominate themes in their symptom descriptions.

**Results:** A PSA value had risen post-surgery in one patient. Two patients' post surgery findings included complications of inability to achieve an erection, and one patient developed incontinence. On the other hand, six patients reported incontinence, erectile dysfunction, and one of the seven had a rising PSA value, but all seven found these surgery outcomes less worrisome, and they did not produce a negative effect on their quality of life post-surgery.

**Implications:** Ability to recognize and discuss prostatectomy side effects provides an opportunity for men and their families to receive anticipatory counseling to problems that may influence the quality of life following the surgery.

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#120

**Vitamin E Succinate Induces Apoptosis in MDA-MB 231 Breast Cancer Cells**

*Sylvester Osayi, Dorrelyn Patacsil, Deepak Kumar*

**Introduction:** Vitamin E Succinate (VES,  $\alpha$ -tocopheryl succinate), an esterified form of vitamin E and an essential micronutrient antioxidant, has been shown to exhibit chemotherapeutic potentials in breast cancer cells. VES has also been shown to be a more potent apoptotic agent than Vitamin E Acetate (VEA,  $\alpha$ -tocopheryl acetate). In the present study, the effects of VES and VEA were evaluated on a highly invasive, hormone-independent breast cancer cell line, MDA-MB 231. **Methods:** MDA-MB 231 cells were treated with varying concentration of VES and VEA for 24, 48, and 72 hr and WST-1 cell proliferation reagent was used to assess the cytotoxicity after the treatment periods. The results obtained were further confirmed by trypan blue dye exclusion assay and cell-counting. To determine the mechanism of cell death the levels of apoptotic proteins were determined. **Results:** A time and dose dependant decrease in cell proliferation was observed following the VES treatment. Contrary to VES - induced cell death, VEA treatment of the cells showed a rebound in cell viability after 40uM concentration and 24 hr of treatment. The results obtained from WST-1 assay were confirmed by cell counting in independent experiments. To ascertain if VES and VEA induce cell death through apoptosis in MDA-MB 231 cells, the expression levels of the apoptotic proteins were studied using western blot analysis and will be discussed.

**Conclusion:** Based on our results, VES proved to be a more potent cytotoxic agent than VEA in MDA-MB 231 cells. Cells treated with VES showed a time and dose dependent decline in cell proliferation. Also, cells treated with VEA showed a rebound in proliferation with increasing time (>24h) and concentration (>40 uM).

**#121****Evaluating the role of Sialic Acid as a Potential Receptor for Foamy Viruses***Lovelyn Romero, Dr. Neil Josephson, Angela Epp*

Foamy viruses are non-pathogenic retroviruses. They are naturally found in non-human primates and other mammals, but not in humans. Gene transfer vectors based on foamy viruses are promising as therapeutic tools for hematopoietic stem cell gene therapy. However, the cell surface receptor used by foamy viruses for infection is still unknown. We found that Baf3 cells, a murine B-cell line, is resistant to foamy virus vector transduction. The block to transduction in the Baf3 cells is at the level of the envelope-receptor interaction. Overexpression of the gene SIAT1, in Baf3 cells (Baf3SIAT cells) overcomes the block to transduction. The gene SIAT1 encodes an enzyme responsible for placing 2,6 sialic acid (SA) residues on glycolipids and glycoproteins. Sialic acid serves as a receptor for a number of different viruses, including influenza. However, other cell lines that do not express 2,6 SA can still be transduced by foamy virus vectors, raising the possibility that SIAT expression in Baf3 cells is overcoming an endogenous inhibitor to transduction. To further test this hypothesis we plan to block receptor binding sites by overexpressing the foamy virus envelope. We will quantitate the level of free 2,6 SA residues on unmanipulated Baf3SIAT cells, and cells that have been rendered resistant to foamy virus vector transduction by envelope overexpression. No change in 2,6 SA levels in these two cell population would argue against 2,6 SA as the foamy virus receptor, but would be consistent with the presence of an inhibitor in Baf3 cells.

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**#122****“Development of an Approach to Improve the Efficacy of a Bystander Cell Based Tumor Vaccine”***Glenn Simmons, Terri Hunter, Sophie Dessureault, Scott Antonia*

Tumors evade T cell mediated rejection, despite the presence of tumor associated antigens (TAA's) and T cells specified for TAA's in cancer patients. In an effort to augment a tumor specific T cell response through effective TAA presentation and co-stimulation by dendritic cells (DCs), our laboratory is developing immunotherapeutic bystander cell-based vaccines. Our current vaccine, GM.CD40L, consists of autologous tumor cells admixed with a bystander cell expressing CD40L; a molecule that potently activates DCs. GM-CD40L has also been engineered to express GM-CSF to promote DC recruitment. Pre-clinical investigations show an increase in tumor specific T cell response in the presence of GM.CD40L in a mixed autologous tumor cell/lymph node cell reaction. Additionally, immature DCs are converted to a mature phenotype in the presence of GM-CD40L. The vaccine has been proven safe in a phase I clinical trial. We are currently developing a next generation of bystander cell. We are incorporating chemokines known to potently induce DC chemotaxis. Bystander cells expressing candidate chemokines, specifically CCL16 and Mip1a, are being directly compared in the ability to recruit immature DCs compared to GM-CSF. We are also attempting to increase the longevity of the bystander line by engineering the MHC I negative cells to express a non-polymorphic MHC molecule on the cell surface, thereby evading NK cell mediated cytotoxicity.

## Professional Oral – Session I

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Friday, April 21, 2006	3:00 PM – 5:30 PM	Forum
<b>Moderators:</b> Barbara Hastie Cassandra E. Simon		
<b>3:00 PM</b> Abstract #124 <b>Measurement of breast and cervical cancer knowledge, beliefs, and attitudes among Latina populations</b> <i>Lydia P Buki, Viviana Pitton</i>		
<b>3:15 PM</b> Abstract #181 <b>Breast and Cervical Cancer Knowledge, Attitudes and Belief Measurement among Asian and Pacific Islander Women</b> <i>Barbara WK Yee</i>		
<b>3:30 PM</b> Abstract #144# <b>"Cancer is fatal": Belief, knowledge, or attitude?</b> <i>Diana D Jeffery, Ann Marie Flores, Lydia P. Buki</i>		
<b>3:45 PM</b> Abstract #150 <b>Using a Theory-Based Database to Track and Assess the Cancer Prevention and Control Activities of Community Coalitions in Northern Appalachia, 2002-2004</b> <i>Brenda C Klusman, Marcyann Bencivenga, Eugene J Lengerich</i>		
<b>4:00 PM</b> Abstract #143 <b>Heterogeneity among Hispanics Regarding Breast and Cervical Cancer Knowledge: Pre and Post Educational Program Results</b> <i>Lina Jandorf, Luisa Feliciano, Deborah O Erwin, Michelle Trevino, Virginia Johnson</i>		
<b>4:15 PM</b> Abstract #138 <b>Gender Differences for Latinos in Cancer Screening and Preventive Care</b> <i>Barbara Ann Hastie, Henrietta L Logan, Scott Tomar</i>		
<b>4:30 PM</b> Abstract #167 <b>African American Women and the Roles of Religion and Spirituality throughout the Breast Cancer Experience</b> <i>Cassandra Elizabeth Simon, Hyoung-Kyoung Higgerson, Martha Crowther</i>		
<b>4:45 PM</b> Abstract #178 <b>Until my change comes: Breast cancer survivorship and the transformation of African American women's health advocacy</b> <i>Elizabeth Ann Williams</i>		
<b>5:00 PM</b> Abstract #179 <b>Treatment seeking behaviors and breast cancer: Past experiences, perceptions and practices among urban African American women</b> <i>Lena Tionne Williams, Sheryl MCurdy, Maria Eugenia Fernandez-Esquire, Robert Chamberlain</i>		
<b>5:15 PM</b> Abstract #156 <b>Increasing African American women's Participation in breast cancer screening program: Putting Research into Action, "Taking Care of Ourselves and Each Other"</b> <i>Jodi Lynn Olson</i>		

## Professional Oral – Session II

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Friday, April 21, 2006	3:00 PM – 5:30 PM	Cabinet
Moderators: Michael S. Simon Willie Underwood		
3:00 PM Abstract #168 <b>Racial differences in breast cancer survival in the Detroit Metropolitan Area</b> <i>Michael Steven Simon, Mousumi Banerjee, Anne-Michelle Noone, Kendra Schwartz, Heather Crossley-May, Fawn D Vigneau</i>		
3:15 PM Abstract #166 <b>Determining the strength of the scientific evidence supporting consensus strategies for reducing health disparities found in the Maryland Comprehensive Cancer Control Plan.</b> <i>Salma N Shariff-Marco, Karen Robinson, Michael Chris Gibbons, Kathy Helzlsouer</i>		
3:30 PM Abstract #175 <b>Racial/Ethnic Disparities In Definitive Treatment For Clinically Localized Prostate Cancer</b> <i>Willie Underwood, Susan Eggly, Louis A Penner, Terrence L Albrecht</i>		
3:45 PM Abstract #142 <b>Computational shortcuts to distinguishing cancer phenotypes in microethnic groups using Phenotype Segregation Network Analysis (PSNA)</b> <i>Fatimah L.C. Jackson</i>		
4:00 PM Abstract #139 <b>Knowledge Of Breast Cancer Screening Among African Immigrant Women In The United States</b> <i>Qiuping (Pearl) Zhou, Kirsten Edmiston, Janet Hooper, Karina Jimenez</i>		
4:15 PM Abstract #149 <b>The Relationship of Body Size to Participation and Success in a Fruits and Vegetables Intervention among Low-Income Women</b> <i>Ann Carroll Klassen, Elizabeth Garrett-Mayer, Sharada Shankar, Peter Houts, Celeste Marie Torio</i>		
4:30 PM Abstract #164 <b>The American Indian/Alaska Native Cancer Survivor's Voice</b> <i>Tracy A Schroepfer, Jackie Matloub</i>		
4:45 PM Abstract #151 <b>Cancer Disparities Among Alaska Natives - 35 Year Perspective</b> <i>Anne P Lanier, Janet J Kelley, Marie J Lavigne</i>		
5:00 PM Abstract #169 <b>Building Upon Cultural Strengths of Native American Communities in New Mexico: A Partnership to Fight Cancer</b> <i>Michele Suina, Jane Cotner, Joyce Naseyowma-Chalan, Gayle Diné-Chacon, Maria Otero, Kristina Flores</i>		
5:15 PM Abstract #170 <b>Reaching Urban American Indians with Cancer Information: Partnerships, Educational Tools, and Community Involvement.</b> <i>Zul H Surani, Lourdes Baezconde-Garbanati, Vanessa Watts, Brian Montano, Jennifer Metz</i>		

## Professional Oral – Session III

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**Friday, April 21, 2006**

**3:00 PM – 5:30 PM**

**Congressional A**

**Moderators:** Karen E. Kim  
Gem Le

**3:00 PM Abstract #145**

**AAPI Community Voices to Make a Change**  
*Nicole Kang, Roxanna Bautista, Amy Wong*

**3:15 PM Abstract #136**

**Cancer Screening Behaviors Among Chinese and Vietnamese in Houston, TX**  
*Beverly Jean Gor, Lovell Allan Jones, Jenny K Yi, Angelina Esparza, TruongSon Hoang*

**3:30 PM Abstract #153**

**Recent Trends In Cervical Cancer Incidence And Survival Among Vietnamese Women In California, 1988-2002: Indicators Of Progress**  
*Gem Le, Myles Cockburn, John Chan, Phuong Nguyen, Anita Sit, Scarlett Gomez*

**3:45 PM Abstract #125**

**Impact of Cervical Cancer Screening Intervention Among Korean American Women in Maryland**  
*Juhee Cho, Hee-Soon Juon*

**4:00 PM Abstract #140**

**Media campaign's role in the successful implementation of the Asian American Health Needs Assessment in Houston, Texas**  
*TruongSon V Hoang, Mike Hernandez, Jenny Yi, Lovell Jones, Angelina Esparza, Beverly Jean Gor, Jan C Liang*

**4:15 PM Abstract #176**

**Evaluation of the impact of a culturally-tailored educational video on changes in breast cancer related behaviors in Chinese women**  
*Judy Wang, WENCHI LIANG, MARC D SCHWARTZ, MARION M LEE, BARBARA KRELING, JEANNE S MANDELBLATT*

**4:30 PM Abstract #147**

**Colorectal cancer screening in Chinese immigrants: Who can deliver the message?**  
*Karen E Kim, Eva Lu-Bonn*

**4:45 PM Abstract #155**

**Colorectal Cancer Screening in Vietnamese Americans**  
*Bang Hai Nguyen, Susan Stewart L, Stephen McPhee J, Hiep Doan T*

**5:00 PM Abstract #148**

**Disparities in Colorectal Cancer Cases at a University Based Hospital.**  
*Karen E Kim, Brenda Huskey*

**5:15 PM Abstract #158**

**The Lived Experience of the Partners of Long Term Breast Cancer Survivors: The Other Side.**  
*Jody Pelusi*

## Professional Oral – Session IV

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**Friday, April 21, 2006**

**3:00 PM – 5:30 PM**

**Congressional B**

**Moderators:** **Isabel Scarinci**  
**Jennifer Tsui**

**3:00 PM Abstract #162**

**Factors Associated with Colorectal Cancer Screening Among African Americans in Church Settings**

*Isabel C Scarinci, Sharina Person, Mona Fouad, Andres Azuero, Collette Strother, Selwyn Vickers*

**3:15 PM Abstract #160**

**Lost in Translation: The Communication Experiences of Low-Income, African-American Women regarding Abnormal Pap Tests and Follow-up**

*Irene P Prabhu Das, Donna Richter, DeAnne K Hilfinger Messias, Deborah Parra-Medina, Kathryn Luchok*

**3:30 PM Abstract #173**

**Cervical Cancer Screening Rates among Foreign Born Women by Region of Origin**

*Jennifer Tsui, Mona Saraiya, Trevor Thompson, Achintya Dey*

**3:45 PM Abstract #159**

**A Pilot Evaluation of Breast and Cervical Cancer Early Detection Program Needs for Serving Women with Disabilities**

*Susanne E Pickering*

**4:00 PM Abstract #135**

**Dia de la Mujer Latina Health Fiesta Project-North, South, East and West (Philadelphia, Atlanta, Puerto Rico and Denver).**

*Venus M Gines, Evelyn Gonzalez*

**4:15 PM Abstract #137**

**Predictors of appropriate utilization of cervical cancer screening among African American women.**

*Martha Isaac Harmon*

**4:30 PM Abstract #163**

**Breast And Cervical Cancer Screening Among Latina Immigrants: How Can We Do It Better?**

*Isabel C Scarinci, Lisa R Bandura, Catherine Brooke, Isabel Garces*

**4:45 PM Abstract #152**

**Adherence to Colorectal Cancer Screening Guidelines among African Americans: A Theoretical Approach to Understanding Barriers and Facilitators to Screening**

*Catalina R Lawsin, Katherine DuHamel, Lina Jandorf*

**5:00 PM Abstract #172**

**Optimization of Medical Sequencing Verification Protocols**

*Erica W Taylor, Steve Scherer, Debra Murray, George Weinstock, Richard Gibbs*

**5:15 PM Abstract #161**

**Cancer & Poverty in Colorado: 1995-2002**

*Mario M Rivera*

## Professional Oral – Session V

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**Friday, April 21, 2006**

**3:00 PM – 5:30 PM**

**Committee**

**Moderators:** **Electra Diane Paskett**  
**Sora Park Tanjasiri**

**3:00 PM Abstract #157**

**Using Community-based Participatory Research to Reduce Disparities in Cervical Cancer among Appalachian Women in Ohio**

*Electra Diane Paskett, Mary Ellen Wewers, Mack Ruffin*

**3:15 PM Abstract #132**

**Wayne State University Center for Urban and African American Health (CUAAH): A Multidisciplinary Approach to Complex Research Questions**

*John Flack*

**3:30 PM Abstract #134**

**Using a community-based participatory research approach to understanding African American community needs about breast cancer**

*Sarah J. Gehlert, Ann Pope, Christopher Masi, Maria Ferrera, Courtenay Savage, Jewell Brazelton, Tina K. Sacks, Priscilla Schwantes*

**3:45 PM Abstract #174**

**Disparities in Chronic Health Conditions among older Puerto Rican women in Boston**

*Katherine Tucker*

**4:00 PM Abstract #177**

**Neighborhood and Stage at Diagnosis of Breast Cancer among Hispanic, African American and White Women in Chicago**

*Richard Warnecke*

**4:15 PM Abstract #131**

**Public Health Nursing and the Utilization of Participatory Research Pilot Data for Program Planning**

*DeAnna A Finifrock, Catherine A Marshall, M Kathryn Coe, Heidi L Burross, Felicia S Hodge, Sharon R Johnson*

**4:30 PM Abstract #126**

**Using a community-based participatory research approach for health care provider training at the Indian Health Service.**

*Suzanne Christopher, Shane Doyle, Adina Smith, Alma Knows His Gun McCormick*

**4:45 PM Abstract #180**

**Community-Based Participatory Research Assessment of Underserved Communities in Mobile, Alabama**

*Raymond B Wynn, Roma S Hanks*

**5:00 PM Abstract #171**

**Weaving an Islander Network for Cancer Awareness Research and Training (WINCART): Community-Based Participatory Research and Network Analysis**

*Sora Park Tanjasiri, Paula Healani Palmer*

**5:15 PM Abstract #146**

**Cultural Competency Curriculum Modules (CCCMs): A Tool to Reduce Health Disparities Among Minorities and The Medically Underserved**

*Ann S Kenny, Guadelupe Pacheo*

## Professional Oral – Session VI

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**Friday, April 21, 2006**

**3:00 PM – 5:30 PM**

**Senate**

**Moderators:** Michelle Simone Marion  
Rani B. Eversley

**3:00 PM Abstract #141**

**Strategies for Recruitment of Healthy Premenopausal Women into the African American Nutrition for Life (A Nu-Life Project)**

*Kelly Patryce Hodges*

**3:15 PM Abstract #182**

**Effectiveness of a Community-based Prostate Cancer Education Kiosk for African American men: Analyses of Cost, Satisfaction, Quality, Knowledge and Intention variables**

*Steven Lenard Young, Folakemi Titilayo Odedina, Helene Vilme, Cynthia Warrick*

**3:30 PM Abstract #128**

**Model Of Prostate Cancer Screening For African Americans**

*YUSSIF MIJIRAH DOKURUGU, Odedina Titilayo Folakemi, Scrivens John, LaRose Pierre*

**3:45 PM Abstract #154**

**Spirited: Sisters Peer-counseling In Reproductive Issues after Treatment: Examining Differences—Are the Helpers Helped?**

*Michelle Simone Marion, Leslie R Schover*

**4:00 PM Abstract #123**

**Measuring Quality of Life among Cervical Cancer Survivors: Instrumentation Challenges in a Cross-Cultural Study**

*Kimlin T Ashing-Giwa , Jinsook Kim , Judith S Tejero*

**4:15 PM Abstract #130**

**Developing and Testing a Lymphedema Intervention**

*Rani B Eversley, Linda Wardlaw, Delores Moorehead Wendy Penney, Suzanne L Dibble, Merry Montgomery*

**4:30 PM Abstract #127**

**IMPACT: An Innovative Approach to Healthcare Delivery**

*Sarah Elizabeth Connor, Laura Baybridge, Sarah Elizabeth Connor, Mark Litwin, James Orecklin*

**4:45 PM Abstract #129**

**Observational and Perceptual Indicators of Racial Disparities in Oncologist-Patient Interactions**

*Susan Eggly, Willie Underwood III, Tanina Foster, Louis A Penner, John C Ruckdeschel, Teneisha Austin, Terrance Albrecht*

**5:00 PM Abstract #133**

**Helping Medically Underserved Patients Prepare to Meet with a Cancer Specialist**

*Lauren M Franklin, Sara O'Donnell, Jeffrey Belkora, Julie Ohnemus*

**5:15 PM Abstract #165**

**Implementing a City-Wide Patient Navigation Research Program in the District of Columbia**

*Francisco Semiao, Steven Patierno*

## Professional Oral

#123

### Measuring Quality of Life among Cervical Cancer Survivors: Instrumentation Challenges in a Cross-Cultural Study

*Kimlin T Ashing-Giwa, Jinsook Kim, Judith S Tejero*

**Background/Rationale:** Cervical cancer disproportionately affects ethnic minority and lower socioeconomic status individuals. Yet, challenges inherent in the development of reliable, valid and culturally consonant health-related quality of life (HRQOL) instruments for use across diverse groups are understudied. The need to assess HRQOL measures for linguistically and culturally diverse cancer survivors is pressing.

**Purpose:** To examine the validity and reliability of the Functional Assessment of Cancer Therapy (FACT-G) subscales with a population-based, multiethnic sample of cervical cancer survivors (CCS). Does the FACT-G demonstrate comparable reliability and validity by ethnicity?

**Methods:** African-(n=51), Asian-(n=71), Latina-(n=287), and European-(n=273) American CCS in Southern California were recruited from the California Cancer Surveillance Program—Los Angeles, Orange, and Desert Sierra regions, and local hospital cancer registries. Surveys were conducted in English, Spanish, Chinese, and Korean. Internal consistency, and exploratory factor analyses and correlation analyses evaluated construct and concurrent validity of the FACT-G HRQOL scale and subscales (physical, family/social, emotional and functional well-being). Concurrent validity between FACT-G subscales and other scales (SF-12, SF-36 General Health subscale) that measure similar dimensions was also assessed.

**Results:** Reliability coefficients (Cronbach's alpha) were 0.70 or higher across ethnic groups except for emotional wellbeing (0.43–0.62). Overall equivalence in construct validity across ethnic groups was observed. Additionally, good concurrent validity (Pearson's  $r$  range 0.40–0.70) suggests each subscale was assessing its intended construct.

**Conclusion/Implications:** Overall, the FACT-G demonstrates good reliability and validity across ethnic groups regardless of language. Ethnic variations are likely cultural variations in sensitivities to individual items rather than non-equivalence between English and translated versions. In general, ethnic differences in FACT-G scores may be considered real differences reflecting their varying cancer-related QOL outcomes.

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#124

### Measurement of breast and cervical cancer knowledge, beliefs, and attitudes among Latina populations

*Lydia P Buki, Viviana Pitton*

There is a growing body of literature documenting cultural influences on breast and cervical cancer screening in Latina women. The majority of cultural constructs relate to knowledge, beliefs, and attitudes about breast and cervical cancer (BCC). The operationalization of these constructs, however, has not received adequate attention. The lack of agreement on the definition of constructs may be creating additional barriers to the adequate development of interventions for this population, which is an important problem because Latinas experience health disparities with regard to both types of cancer. In this paper, we will review the literature on BCC screening in Latinas, with a particular focus on the measurement of knowledge, beliefs, and attitudes.

**#124 (continued)**

Studies that measured knowledge, beliefs, and attitudes about BCC in Latina women were identified through MEDLINE and PsycInfo. Additional articles were identified using the reference lists from the articles obtained. We identified 35 articles that claimed to specifically measure these constructs in a quantitative manner. Areas covered in the measures included risk factors, etiology, signs and symptoms, early detection methods, screening guidelines, and prognosis. We found that the constructs were not clearly operationalized in these studies. For example, items with similar wording were used to tap into different constructs, even though the meaning of the item is essentially the same. In one study, "Most cancers can be cured if detected early" was used to measure knowledge. In another, "Breast cancer can be cured if detected early" purported to measure beliefs, and in a third study, the item "If cervical cancer is found early, it can be cured" was used to measure attitudes. In all, we identified an additional three items with similar wording as these, and overall, 63% of studies used the item to measure attitudes, 18% beliefs, 9% knowledge, and 10% a knowledge/belief combination. Implications for future research will be discussed.

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**#125****Impact of Cervical Cancer Screening Intervention Among Korean American Women in Maryland**  
*Juhee Cho, Hee-Sooon Juon*

Although Korean American women (KAW) have twice the rate of cervical cancer than white women, they demonstrate low rates in participation in cervical cancer screening. Disparities in cervical cancer screening related to lack of spoken English proficiency is under-researched. This study examined the impact of a cervical cancer intervention on intentions to do Pap smear among KAW. Face-to-face pre-intervention surveys were conducted in control (n=108) and intervention groups (n=120), and were followed by implementation of a cervical cancer education program. At six months, both groups were re-interviewed by phone (105 control and 110 intervention participants). The intervention effect was statistically significant. Women in the intervention group were 2.48 times more likely to report intentions to have Pap smear than those in the control group. Prior intentions, age, spoken English proficiency, and positive attitudes toward Pap smear were associated with follow-up intentions to have the test. This culturally and linguistically tailored educational intervention was effective in increasing cervical cancer awareness in a non-English speaking population.

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**#126****Using a community-based participatory research approach for health care provider training at the Indian Health Service.**

*Suzanne Christopher, Shane Doyle, Adina Smith, Alma Knows His Gun McCormick*

Apsaalooke (Crow Indian) community members and Montana State University faculty members have been working in partnership on health projects in the Apsaalooke community since 1996. Principles of community-based participatory research have informed all of the work. In 2003, as part of planning for the next phase of a cervical health research grant, community members stated that working with health care providers at the Indian Health Service (IHS) and with the IHS in general should be a priority. Community members reported that there are barriers to women receiving health care that need to be addressed in order to increase Pap test rates. Northern Plains Native American women, of whom the Apsaalooke are a part, have significantly higher rates of cervical cancer mortality than the US All-Races rate and rates for Native American women in other parts of the country. This talk will cover 1) the participatory process that community members and researchers used to decide this area as a priority; 2) the process of determining what types of data were necessary to collect and how data should be gathered in order to inform development of the training; 3) results of pre-intervention open-ended interviews with community women on interactions with health care providers; 4) results of pre-intervention interviews with health care providers on interactions with women in the community; and 5) decisions on what would be included in provider training including such components of the training as a video, provider continuing medical education, and long-term one-on-one mentoring of health care providers by Apsaalooke women.

#127

**IMPACT: An Innovative Approach to Healthcare Delivery**

*Sarah Elizabeth Connor, Laura Baybridge, Sarah Elizabeth Connor, Mark Litwin, James Orecklin*

There are few options for a man diagnosed with prostate cancer who lacks the health care coverage or financial means to seek treatment. The mission of IMPACT: Improving Access, Counseling and Treatment for Californians with Prostate Cancer is to provide high quality prostate cancer treatment and related medical care for indigent Californians who are uninsured or underinsured. The Program is dedicated to improving access to prostate cancer care and treatment. It is the only program of its kind nationwide to address the public health issue of prostate cancer in this population. IMPACT addresses the whole patient, not just the prostate cancer. Prostate cancer treatment and related health care services are available at no cost to eligible men and include a wide variety of options provided by community physicians and health care facilities. The Program funds prostate cancer treatments including surgery, 3-D conformal radiation therapy, palliative radiation therapy, brachytherapy, hormone therapy, watchful waiting, and chemotherapy. Enrolled patients enlist the services of an experienced Clinical Team that provides individualized patient guidance, prostate cancer care coordination, and health education. Other Program services available include short-term personal and family counseling, visiting nurses, nutrition education, and access to culturally competent, literacy-sensitive prostate cancer educational materials. IMPACT is designed to empower the patient by addressing not only patients' acute treatment needs, but also their longer term needs to help them return to healthy, fulfilling lives after prostate cancer.

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#128

**Model Of Prostate Cancer Screening For African Americans**

*Yussif Mijirah Dokurugu, Odedina Titilayo Folakemi, Scrivens John, LaRose Pierre*

**Background:** African American (AA) men have the highest incidence of prostate cancer compared to other racial/ethnic groups in the US. Also, they do not have adequate knowledge about prostate cancer disease, and are less likely to correctly identify early symptoms of prostate cancer, more likely to believe pain is the first symptom of prostate cancer and have a poor prostate cancer survival rate.

**Rationale and Purpose:** Few studies have attempted to fully understand factors which facilitate / deter prostate cancer screening among at risk AA men using a valid theoretical framework. Thus, the goal of this study was to develop a framework, which explains African American men's participation in prostate cancer screening based on health behavior theories.

**Methods:** Study participants were AA men between 40 and 70 years resident in Florida. A 137 item survey was used to assess past behavior, behavioral intention, attitude, social norm, perceived behavioral control, program intervention factors, perceived susceptibility, perceived severity, appraisal processes and demographic variables.

**Results:** Valid responses were received from 194 men. Most of the participants were between 50 and 59 years, had some college training, married, urban residents, and full-time employees. Intention to participate in prostate cancer screening was directly determined by past behavior, attitude, perceived behavioral control, perceived susceptibility, knowledge and employment status. Physician discussion and income were also found to be significant predictors of prostate cancer knowledge.

**Conclusions and Implications:** Results from this study notes important factors that can be targeted to enhance informed decision making about prostate cancer screening by AA men. Future studies should focus on developing and evaluating the effectiveness of intervention programs based on these factors.

#129

**Observational and Perceptual Indicators of Racial Disparities in Oncologist-Patient Interactions**  
*Susan Eggy, Willie Underwood III, Tanina Foster, Louis A Penner, John C Ruckdeschel, Teneisha Austin, Terrance Albrecht*

**Background:** Racial disparities in cancer health outcomes may be related to the quality of physician-patient interactions. Few studies have reported racial differences based on direct observations of outpatient oncology encounters.

**Methods:** We video recorded oncologist-patient/companion outpatient encounters at multidisciplinary clinics at two comprehensive cancer centers. We interviewed the patients 1-2 weeks after the observed encounter to obtain their perceptions of the interaction and the factors that were the basis for their treatment decisions. Trained coders observed the interactions and rated the quality of the relationship and specific physician behaviors. The sample included White patients (n=168) and African American patients (n=33). The groups did not differ in age (mean = 57) or sex (males = 56%; females = 44%).

**Results:** African Americans were less likely to have a support person in the interaction (46% versus 93% of white patients,  $p < .05$ ). African Americans were more likely to report side effects as a factor in their decision about whether to enroll in a trial, ( $p < .05$ ), more likely to have second thoughts about their treatment decision ( $p < .05$ ) and have less confidence in their oncologist ( $p < .05$ ). Results of observations showed that compared to interactions with white patients, physicians provided less appropriate amounts of information to African American patients, were more likely to talk over/interrupt African American patients, appeared less organized, and were less likely to provide data-based recommendations/information to African American patients.

**Conclusions:** Preliminary results of observations and patient perceptions showed racial differences in the quality of oncology interactions. Further research should investigate the influence of these differences on the quality and/or perception of care that patients receive following the interactions.

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#130

**Developing and Testing a Lymphedema Intervention**

*Rani B Eversley, Linda Wardlaw, Delores Moorehead Wendy Penney, Suzanne L Dibble, Merry Montgomery*

The objective of this project to develop and test the Total Arm Care Intervention (TACI<sup>©</sup>) program, a brief behavioral intervention to offer low-cost and culturally sensitive post-treatment symptom reduction for arm lymphedema after breast cancer surgery. In preparation for the TACI feasibility test (N=40 women are currently being recruited. TACI has developed measures, collected qualitative data, developed the intervention and manual. Qualitative data have been collected from 3 focus groups. Women (N=28) who participated in focus groups were volunteers who were self-referred from posted notices and fliers. Eight were African American, 9 were Caucasian, 6 were Latina, 5 were Asian. Two focus groups were conducted at English. One focus group was conducted in Spanish. Themes from the English speaking focus groups included the following. 1) women wished that they had been told about lymphedema prior to their surgery, 2) they were most often told by a nurse or cancer patient navigator, rather than by their physician, 3) breast cancer support groups help with dealing with lymphedema, 4) women were motivated to do whatever stretching exercises they were given, 5) stretching exercises were generally drawn in stick figures on paper and xeroxed, 6) stretching exercises (finger walking, arm lifts, broomstick) help with pain, 7) infections in the lymphedema affected arm can be very bad - even life threatening. additional themes did surface in the Spanish speakers group: 1) providers do not take requests to avoid puncturing the affected arm seriously (one women reported that her physician attempted to give her chemotherapy through her lymphedema affected arm), 2) lymphedema related information is only offered in English, 3) stretching exercises are difficult to do when you are tired from work, 4) it is difficult to do stretching exercises from examples on paper.

**#131**

**Public Health Nursing and the Utilization of Participatory Research Pilot Data for Program Planning**

*DeAnna A Finifrock, Catherine A Marshall, M Kathryn Coe, Heidi L Burross, Felicia S Hodge, Sharon R Johnson*

**Background:** Few studies exist regarding the work experiences of cancer survivors. One study found in a random telephone survey of 500 cancer survivors that the survivors reported losing their jobs at five times the rate of other workers.

**Rationale:** A cancer diagnosis and/or subsequent treatment or its effects may preclude continued employment and thus affect the economic status of the individual and of the family, as well as other quality of life variables.

**Purpose of Study:** To identify, through participatory action research, those factors that serve to either facilitate employment or hinder it for adult cancer survivors.

**Methods:** 20 individuals were interviewed for this pilot study; 10 were cancer survivors and all were members of a Northern Minnesota American Indian tribe. An additional 10 individuals were family members identified by the cancer survivors as someone having a substantial contribution or role in their experience as a cancer survivor. The majority of family members were also members of the tribe. This was primarily a qualitative study, exploratory and descriptive by design.

**Results:** Half of the survivors had been diagnosed within two years of the interviews. The family members of these more recently diagnosed individuals reported having fears related to a second cancer, a recurrence, and metastasis of the cancer. They reported that the cancer had been distressing for the family, that health care had interfered with personal relationships, and that the illness had created a financial burden.

**Implications:** Family members, in addition to survivors, may need intervention during cancer treatment. Qualitative data indicates that understanding employment discrimination in a cancer situation may not be well understood by cancer survivors.

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**#132**

**Wayne State University Center for Urban and African American Health (CUAAH): A Multidisciplinary Approach to Complex Research Questions**

*John Flack*

The Wayne State University (WSU) Center for Urban and African American Health consists of five Cores and three Projects with participation of 29 investigators from 14 different disciplines. The five Cores represent specialized areas of expertise and services required across all our research projects. These Cores form the foundation of our application. The Cores are: 1) Administration; 2) Psychosocial and Community Measures; 3) Recruitment and Clinical Measures; 4) Biostatistics and Research Database; and 5) Genomics. African Americans were selected as the primary study population for the Center because of their high burden of obesity-related disease such as breast cancer and cardiovascular diseases (hypertension, heart failure, diabetes mellitus, and coronary heart disease). The three Projects are: 1) Project 1: Obesity, Nitric Oxide, Oxidative Stress and Salt Sensitivity, 2) Project 2: Weight Loss in Breast Cancer Survivors, and 3) Project 3: A Dyadic Intervention for Cardiac Rehabilitation Patients. These Projects are thematically linked through obesity, diet and other lifestyle factors including physical activity, and obesity-related cardiovascular disease and cancer. Our research efforts are focused on understanding the mechanisms operating at multiple levels (environment, lifestyle, physiology, genetics) mediating known disparate chronic conditions and their precursors. We also seek to identify preventive strategies and therapeutic approaches that might alleviate the disproportionate burden of disease. Primary as well as interactive effects of environmental exposures (household and community-level) and psychobehavioral characteristics with physiological measures (e.g., 24-hour BP burden and oxidative stress), genes, and body composition will be explored in relation to their impact on study outcomes.

#133

### **Helping Medically Underserved Patients Prepare to Meet with a Cancer Specialist**

*Lauren M Franklin, Sara O'Donnell, Jeffrey Belkora, Julie Ohnemus*

**Background:** In 2004, the California Breast Cancer Research Program awarded a Community Research Collaboration grant to UCSF and two rural resource centers. The resource centers provide free supportive services to cancer patients in Humboldt and Mendocino counties, whose populations of 86,000 and 126,000, respectively, include 6% and 5% Native American, 6% and 17% Hispanic, and 20% and 16% under the poverty line. Preliminary work indicated existing, mostly White clients were satisfied with the centers' implementations of Consultation Planning (CP), a UCSF visit preparation intervention.

**Purpose:** We asked community health leaders how CP could best serve our counties. They challenged us to adapt the service to address the specific needs of underserved cancer patients, including ethnic/racial minorities and geographically isolated patients. We explored the following: 1) Is CP appropriate for diverse county residents? 2) Can CP be effectively delivered by telephone?

**Methods:** We interviewed 15 cultural advisers to document key stakeholder requirements and specify design changes. We administered acceptability surveys and conducted semi-structured interviews with 12 Latina and Native American survivors. We also surveyed and interviewed 10 most recent recipients of telephone-based CP. Interviews were audiotaped and results were coded thematically.

**Results:** Cultural advisers affirmed that CP was appropriate and useful for their communities, while emphasizing the need for community outreach and translation services. After modifications were made to address themes of trust and family involvement, diverse breast patients indicated that the intervention was acceptable and beneficial, rating CP 3.4 out of 4 on the acceptability survey. Past recipients of telephone-based CP rated Tele-CP as 9.4 out of 10 on a previously validated satisfaction scale.

**Implications:** Findings suggest we can extend the reach of Consultation Planning to minorities and the medically underserved in these two communities. Having completed the formative phase of this project, we are now working on a protocol for impact evaluation.

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#134

### **Using a community-based participatory research approach to understanding African American community needs about breast cancer**

*Sarah J. Gehlert, Ann Pope, Christopher Masi, Maria Ferrera, Courtenay Savage, Jewell Brazelton, Tina K. Sacks, Priscilla Schwantes*

Although White women have a higher incidence of breast cancer, African American women are more likely to die from it. Group disparities persist even after controlling for access to care. Factors contributing to this health disparity likely are numerous and complex. Community-based participatory research (CBPR) is a promising approach for including stakeholders in investigations of group differences in health. In this study, CBPR was used to include community members as co-investigators via a three-phase iterative process. Fifteen of Chicago's 77 designated neighborhood areas, all predominately African American and located on the South Side, were targeted. Specific recruitment techniques were utilized to obtain a representative sample from each neighborhood area. Focus groups based on CBPR principles were held within the neighborhoods in which participants resided and were designed to allow issues, beliefs, and concerns to emerge in unstructured interviews. Data obtained were used to inform other research projects. Five hundred and five women and men age 18 years and over were interviewed in 49 groups. Analysis using NVIVO software revealed a paucity of information on breast cancer in the community and culturally-sensitive mechanisms for building the community capacity of those affected by breast cancer. Phase II is the first ever South Side breast cancer summit, planned by focus group members and project investigators, to which the 1300 residents who volunteered for the CBPR project were invited. Its purpose is to disseminate findings from phase I and, using a small group problem-solving approach, develop community-generated interventions, to be implemented in Phase III.

#135

**Dia de la Mujer Latina Health Fiesta Project-North, South, East and West (Philadelphia, Atlanta, Puerto Rico and Denver).**

*Venus M Gines, Evelyn Gonzalez*

The health of Latinas and their behavior towards cancer has become a topic of public health research recently. Aside from language, culture, limited educational and health literacy levels, it is extremely important to build a network and infrastructure to approach breast health in a culturally and linguistically proficient manner. Less acculturated Latinas experience barriers to access to health services due to fear and distrust. The fear about cancer is possibly due to misinformation or lack of, and the distrust may come from stories about medical abuse or anti-immigrant sentiment. In comparison with more acculturated Latinas, those with lower levels of acculturation are less likely to have had annual mammograms, and to have health insurance coverage and a regular source of health care. *Día de la Mujer Latina* is a culturally-proficient health fiesta project that has successfully eliminated many of these hurdles by providing competent cancer education with a picturebooks/fotonovela (*Una Nueva Esperanza*) developed by a Latina breast cancer survivor, free or low cost cancer screening in a "safe environment" amidst a festive cultural setting, and patient navigation in 4 regions (West (Denver); East (Puerto Rico); South (Atlanta) and North (Philadelphia). Denver and Philadelphia has a population of more acculturated Latinas, as opposed to Atlanta and Puerto Rico.

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#136

**Cancer Screening Behaviors Among Chinese and Vietnamese in Houston, TX**

*Beverly Jean Gor, Lovell Allan Jones, Jenny K Yi, Angelina Esparza, TruongSon Hoang*

The Asian American Health Needs Assessment (AsANA) survey project was conducted to gather health risk data on the Chinese and Vietnamese population in the Greater Houston area, a rapidly growing community for which little health data exists. The sample included 400 Chinese and 400 Vietnamese randomly selected households in a four-county area. Questions on the telephone survey asked respondents about their participation in cancer screening. Results of the survey indicate that percentages of Asians participating in cancer screening varied, depending on the screening procedure. While female respondents over 40 reported satisfactory rates of mammography, rates for cervical cancer screening rates fell below the percentages reported by other racial and ethnic groups in Texas and the US. For male respondents over age 40, prostate cancer screening rates were below those of other groups as well. For respondents over the age of 50, the percentage reporting having had colorectal cancer screenings did not meet the Healthy People 2010 goals. These results have significant implications because cervical and colorectal cancer are among the top five cancers experienced by Asian Americans. National data also indicate that prostate cancer may be increasing among Asian American males especially as they adopt Westernized dietary and lifestyle habits. Recent breast cancer education and outreach efforts in the Houston area might have contributed to the satisfactory percentages of age-appropriate Asian women receiving mammograms. Analysis of demographic characteristics and attitudes towards cancer screening in this population will lead to greater understanding of the factors influencing screening behaviors. The results of the AsANA study may assist researchers and health educators in designing programs to address cancer disparities in a culturally sensitive manner.

#137

**Predictors of appropriate utilization of cervical cancer screening among African American women.**  
*Martha Isaac Harmon*

**Background:** Regular screening with a Pap test is the most important thing women can do to reduce their risk of cervical cancer, which is largely preventable and is curable if detected early. Cervical cancer is one of eight cancer sites without significant improvements in survival. African American women have the highest age-adjusted mortality rate of cervical cancer.

**Rationale:** While the risk factors for cervical cancer are well known and screening patterns in a broad sample of women have been studied, research is needed to systematically examine predictors of cervical cancer screening that will identify women at risk for underutilization.

**Purpose:** The purpose of the study was to describe the relationship of the study's potential predictor variables to appropriate utilization of cervical cancer screening.

**Theoretical Approach:** The Healthcare Outcomes Model served as the conceptual foundation to examine the association between structure and process predictors and the outcome.

**Methods:** The study used data from the California Health Interview Survey 2001, a geographically stratified, random digit dial (RDD) telephone survey of 55,428 households. A representative sample of 1,452 California African American women without a history of hysterectomy was obtained. Data were analyzed using SAS® and SAS-Callable SUDAAN®.

**Results:** Predictors of underutilization at the 3-year interval were no insurance, age  $\geq 65$  years, high school education or less, never married, quit smoking, and no usual source of care. Implications: This study adds to the body of literature linking structure and process concepts to outcomes. Research to identify predictors of screening is essential to develop interventions that will increase appropriate utilization, thereby reducing the risk of invasive cervical cancer incidence and mortality among African American women.

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#138

**Gender Differences for Latinos in Cancer Screening and Preventive Care**  
*Barbara Ann Hastie, Henrietta L Logan, Scott Tomar*

**Background:** This study elucidates trends of cancer detection and prevention among an intra-ethnic Latino sample in Florida. Early detection of cancer is reported to be the strongest predictor of maximizing treatment options and survival. Yet, minorities are diagnosed later, have worse prognosis, and late detection has led to an alarming disproportion of cancer deaths. However, little is understood about the trends and barriers to minority cancer screenings.

**Methods:** 892 (66% female) Latinos participated in a telephone survey conducted by the University of Florida. Participants included: Cuban (46.3%), Puerto Rican (7.7%), Nicaraguan (16.9%), Colombian (14%) or other (15%). Mean age was 44 years, 54.4% had more than 12 years of education and 57.4% were employed. To determine gender differences, Chi-square analyses and ANOVAs were conducted.

**Results:** Significant differences were found such that women had more cancer screenings (57.2%) and more doctors recommended screenings ( $P's < .001$ ), but no differences emerged on willingness to partake in testing, as both were likely to participate if a close friend or relative did. Differences were found on the perception of risk to cancer with women reporting higher perceived threat, increased action if a family member had cancer, if they had a symptom, and if a religious organization sponsored screenings ( $P's < .05$ ). Neither gender would preclude screening for fear of being a "guinea pig," confidentiality concerns or lack of trust in doctors.

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### #138 (continued)

**Conclusion:** This study lends credence to the influence of family, friends, doctors and religious organizations on Latinos, especially women, for cancer screenings, thus underscoring the importance of social support, doctor's role, and community in prevention. Since women have more *perceived* risk of cancer, they may pursue more screenings even though there may be no difference in *actual* risk. This further highlights the influences and trends affecting Latinos in cancer detection and the need for additional prevention efforts.

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### #139

#### **Knowledge Of Breast Cancer Screening Among African Immigrant Women In The United States** *Qiuping (Pearl) Zhou, Kirsten Edmiston, Janet Hooper, Karina Jimenez*

**Background** There are striking disparities in breast cancer outcomes between different ethnic groups in the United States. Despite ample evidence that screening is the most valuable tool to reduce breast cancer mortality, it continues to be underused by minority women, especially new immigrants. Among numerous factors contributing to limited participation in screening services, lack of awareness/knowledge is a major one for immigrant women. However, the scope of knowledge deficiency and factors associated with it are not well documented.

**Purposes** The purposes are 1) to assess knowledge levels of breast cancer screening in low-income women immigrated from Africa; and 2) to identify factors associated with their knowledge levels.

**Methods** This descriptive study used a sample of 108 low-income pregnant women attending an OB clinic. All women were born in African countries (n=108). We interviewed each woman in a private room prior to an individualized education session to assess her knowledge about 1) risk factors for breast cancer, 2) clinical breast exam, 3) breast self exam and 4) mammography. Coefficient alpha for this four-item tool is 0.86. Demographic and social-economic variables were collected by chart review. We used descriptive statistics, t-test and correlation analysis to analyze data.

**Results** Knowledge about breast cancer screening was extremely low in African born women, 72.6% had never heard of mammograms. Compared to U.S. born women with similar medical and social-economic status (n=158), African born women reported significantly lower knowledge levels (3.9 vs. 8.9, P

**Implications** These findings suggest a pressing need to develop breast cancer education and screening programs for African-born American women, especially for more recent immigrants, to increase their awareness thus leading to behavior changes. A program targeting pregnant women helps break barriers to reach this population.

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### #140

#### **Media campaign's role in the successful implementation of the Asian American Health Needs Assessment in Houston, Texas**

*TruongSon V Hoang, Mike Hernandez, Jenny Yi, Lovell Jones, Angelina Esparza, Beverly Jean Gor, Jan C Liang*

Language and cultural barriers in the Asian American community often prevent researchers from reaching this vulnerable, and often isolated, population. Asian-language media campaigns have been shown to be effective in reaching certain segments of the Asian population, though most of these studies were conducted in areas where there exists strong historical Asian American establishments. Houston's Asian community is relatively young in terms of its sociopolitical presence, and thereby may offer less accessibility to public health researchers. This study evaluated the effectiveness of a media campaign designed to increase Chinese and Vietnamese participation in the Asian American Health Needs Assessment (AsANA) survey in the Greater Houston area.

An aggressive media campaign composed of print, radio, television and face-to-face communications was conducted in the Asian and mainstream communities in the two years leading up to and during the administration of the AsANA telephone survey. A sample of 121 Chinese and 139 Vietnamese randomly selected respondents were asked to evaluate the impact of the AsANA media awareness campaign.

**#140 (continued)**

Results were weighted by age, gender, ethnicity and household size according to the 2000 U.S. census results of the four-county target area. 814 completed surveys were collected in nine weeks. The refusal rates were 26.8% for Chinese and 23.8% for Vietnamese. Of those who responded to the media awareness questions, 25% Chinese and 71.5% Vietnamese believed that the media campaign influenced them to participate in the survey. The top media sources for Chinese and Vietnamese in Houston were ethnic radio, newspaper, television, and word of mouth. The AsANA's culturally and linguistically appropriate media campaign was very successful in increasing cooperation rate in Houston's Chinese and Vietnamese community.

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**#141**

**Strategies for Recruitment of Healthy Premenopausal Women into the African American Nutrition for Life (A Nu-Life Project)**

*Kelly Patryce Hodges*

For African American (AA) women younger than 40 years of age, the incidence of breast cancer is higher than that of White women of similar age.

Additionally younger AA women are more likely to be diagnosed with advanced breast cancer compared with younger White women resulting in decreased relative survival rates for AA women. The A Nu-Life project is a prospective study designed to examine the role of nutrition intervention in preventing breast cancer in healthy pre-menopausal AA women. The purpose of this study was to determine the usefulness of recruitment strategies employed in contacting potential participants for the A Nu-Life project by examining the recruitment efficiency of each recruitment method. The number of women contacted and enrolled by each recruitment methods was also calculated.

The mass media recruitment method was the most effective with 43% of the women contacted and 52% of the women enrolled/randomized acknowledging that they learned of the study from this method. The presentations, community events, and flyer/brochure methods accounted for 11%, 21%, and 25% respectively, of contacted women. Of the women randomized into the study, 8%, 17%, and 23% respectively, were recruited using the presentations, community events, and flyer/brochure methods of recruitment. While multiple recruitment strategies were used in the A Nu-Life project, the mass media method was the most efficient in generating the greatest number of randomized participants. These findings demonstrate the usefulness of developing culturally tailored mass media efforts that encourage the participation of healthy premenopausal AA women in clinical research.

#142

**Computational shortcuts to distinguishing cancer phenotypes in microethnic groups using Phenotype Segregation Network Analysis (PSNA)**

*Fatimah L.C. Jackson*

In highly diverse and substructured nations such as the USA, it is very difficult to know which population subgroups to look for cancer-affiliated candidate genes, cultural behaviors, and environmental exposures. Indeed, most of our cancer gene association studies are typically wrong when extended beyond the specific individuals studied. This is because most of the biomedical, public health, and epidemiological data on cancer phenotypes study individuals outside of the specific microethnic context or are aggregated at the racial level of analysis and hence insensitive to regional variation in cancer susceptibilities. Phenotype segregation network analysis or PSNA allows us to identify and quantify the different phenotypes associated with various cancers as expressed in regional microethnic groups (MEGs). MEG affiliation is determined by geographical location, historical context, and biological lineage coalescence. As a computation-assisted approach, PSNA uses detailed local population stratification to re-sort identified microethnic groups based on their disease presentations, rather than racial affiliation. Permutation-based reshuffling better reveals the significant biological, cultural, and biocultural risks underlying cancer health disparities for particular MEGs. PSNA predicts which MEGs will exhibit cancer-linked phenotypic traits, based on either shared cultural/behavioral factors, closely associated genetic factors, and or related non-genetic biological factors. PSNA, therefore, serves as a pointer for further genetic, cultural, and environmental studies, within microethnic groups, as to the biocultural origins of specific disease-related susceptibility markers. Specific examples of the application of PSNA for prostate and breast cancers are presented.

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#143

**Heterogeneity among Hispanics Regarding Breast and Cervical Cancer Knowledge: Pre and Post Educational Program Results**

*Lina Jandorf, Luisa Feliciano, Deborah O Erwin, Michelle Trevino, Virginia Johnson*

**Background:** Breast cancer is the most commonly diagnosed cancer among Latinas in the United States. Likewise, Centers for Disease Control & Prevention data on new cases of cervical cancer among Hispanic and non-Hispanic women diagnosed during 1992–1999 in 11 geographic areas covered by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program indicate that, despite an overall decrease in the rate of new cases of invasive cervical cancer, among women who are at least 30 years of age, rates for Hispanic women are about twice as high as those for Anglo women.

**Rationale:** Beliefs, knowledge and access may impact with screening behaviors and underutilization of screening services has been linked to higher incidence and mortality among minority groups. Esperanza y Vida®, a culturally competent, community-based breast and cervical cancer education program designed to meet the specific cultural, educational, knowledge, and learning-style levels of underserved Latinas has been developed. Considering the ethnic heterogeneity within Hispanic communities, there is a need to study breast and cervical cancer control programs that can effectively increase participating in cancer screening using culturally sensitive and individualized interventions to increase knowledge, address beliefs appropriately, and counter the social sanctions that may interfere with screening.

**Methods:** Group educational sessions were held, conducted by trained health educators with lay educators and witness breast cancer survivors. The majority of the groups were conducted in Spanish. Men and women were invited to attend. Results: Outcomes from 16 educational sessions with over 240 female and male participants (give the % of men and of women here identified a significant gain in overall knowledge: pre-test mean 45.6% correct; post-test mean 73.3% correct). Additionally, acquired knowledge increased 30% points for breast cancer and 23 % points for cervical cancer with interesting differences among age, gender, and Latina subgroups: Mexican, Dominican, and Puerto Rican.

## #144

### "Cancer is fatal": Belief, knowledge, or attitude?

*Diana D Jeffery, Ann Marie Flores, Lydia P. Buki*

Recent research shows that KBAs are not being operationalized consistently across studies. This presentation will present theoretical considerations to guide future examinations of cancer knowledge, beliefs and attitudes among Latina, Asian and Pacific Islander women. "What is knowledge?" has been debated since Socrates posited that knowledge is what we know and believe to be true based on justifiable truths. Social epistemologists have defined knowledge as a "collectively accepted system of beliefs." Knowledge, then, may involve sociocultural factors. Social Cognitive Theory incorporates both individual and social levels of knowledge, and is often used to examine how individuals with lower SES acquire cancer knowledge. Beliefs are mental representations of what we hold to be true irrespective of justification, and may/may not be proven or testable. The Health Belief Model is one common theory used to study minority populations and cancer KBA. However, few studies discern between "belief" and knowledge based on justifiable truth, while almost all assume that if an individual believes he or she is at risk for cancer, then action will ensue. Attitudes create an internal judgment scale that defines feelings toward self, others, situations, or objects. The Theory of Planned Behavior and the Theory of Reasoned Action are two examples of theoretical models that include "attitudes" as well as beliefs, intentions to act, and perceived behavioral control. These latter theories incorporate Reference Group Theory which simultaneously considers multiple dimensions of attitude and knowledge with respect to a mental representation of how a trusted person would act. These latter theories are occasionally used in cancer control studies with Latina or API populations, and may explain the success of several community-based intervention studies.

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## #145

### AAPI Community Voices to Make a Change

*Nicole Kang, Roxanna Bautista, Amy Wong*

**Method(s):** The Asian & Pacific Islander American Health Forum was funded by the CDC to address the impact of cancer and survivorship in the AAPI population in the US and Pacific Island Jurisdictions. Through regional partnerships, we conducted seven focus groups in Washington, Hawaii, Washington DC, Massachusetts, and Minnesota. To solicit focus group participation, flyers with focus group information were distributed at conferences and through listservs. Focus group sessions, which were one hour in duration, were facilitated by APIAHF and its consortium partners with questions pertaining to cancer treatment and support services, challenges and barriers in accessing cancer care, and recommendations for future action. Participant responses were compiled into summary briefs.

**Results:** The following themes emerged: -Lack of healthcare facilities and providers that provide culturally and linguistically appropriate healthcare, advocates who lobby for and develop relevant and culturally appropriate programs, and accessible NGOs and comprehensive cancer centers. -Fatalistic view of cancer that discourages individuals from discussing their prognosis and seeking timely and appropriate care. -Low usage of mainstream healthcare services due to uninsurance in AAPI communities.

**(Some)Recommendations from Participants:** -Increased access to low-cost services -Increase in programs to address financial barriers for care -Development of AAPI specific cancer support groups in the US

#146

### **Cultural Competency Curriculum Modules (CCCMs): A Tool to Reduce Health Disparities Among Minorities and The Medically Underserved**

*Ann S Kenny, Guadelupe Pacheo*

The last decade has witnessed increased awareness about the existence of racial and ethnic disparities in health. With the release of the National Standards for Culturally and Linguistically Appropriate Services in Health Care (CLAS), national organizations have released standards to support these provisions. The American Society of Clinical Oncology has also integrated key concepts from the CLAS Standards into their 2004-2007 Strategic Plan to improve cancer care and prevention. However, even with the widespread dissemination of professional standards to improve cultural competency training, many health care providers are still under-prepared to effectively treat minority patients. To help ensure all people entering the health care system receive equitable and effective treatment, the Office of Minority Health at the U.S. Department of Health and Human Services, developed the Cultural Competency Curriculum Modules (CCCMs) to equip physicians with cultural and linguistic competencies required to improve the quality of care for ethnically diverse patients. Science Applications International Corporation launched the CCCMs in December 2004. The CCCMs are a case-based curriculum featuring streaming-video vignettes that help participants explore culturally competent care concepts. One case involves an older Vietnamese patient who may have cervical cancer. Cross-cultural communication issues arise when the physician attempts to diagnose and treat the patient's condition. The course is accredited for nine CME credits and offered in DVD and web formats at no cost to participants. The CCCMs currently have over 1,600 registrants who earned over 2,200 CME credits. Over 77% of participants have stated the modules enhanced their ability to treat and/or manage their patients; over 81% have said the course improved their effectiveness to communicate with patients. The CCCMs are currently undergoing a mixed-method quantitative and qualitative evaluation to explore the extent to which completion of the curriculum results in self-reported improvements in the provision of culturally competent health care.

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#147

### **Colorectal cancer screening in Chinese immigrants: Who can deliver the message?**

*Karen E Kim, Eva Lu-Bonn*

**Background:** Colorectal cancer (CRC) ranks third in cancer incidence and mortality in Asian Americans. Studies on colorectal cancer in Asian Americans suggest that screening rates are among the lowest reported. Barriers to colorectal cancer screening (CRS) in immigrants include language, access and absence of routine health care. The effectiveness of ethnic and culturally specific community outreach on colorectal screening in Chinese immigrants has not been previously reported. This study compares the effectiveness of physician directed compared to lay health educator directed CRS programs in Chinese immigrant communities.

**Methods:** Chinese community based organizations were asked to randomize their clients aged 50 and above into two CRS programs. Physician directed programs involved education through a trained medical interpreter, followed by fecal occult blood testing (FOBT), while lay educator programs (LHE) used peer educators for education on CRC and FOBT. All participants completed a translated survey on CRS compliance, CRC risk perception and knowledge gained. The effectiveness of each educational program on CRS behavior was assessed by compliance with fecal occult blood testing (FOBT). Results: 260 participants attended CRC programs. The average age was 54; 55% were women, the average years in the US was 10. 80% of participants reported speaking Chinese at home and were of limited English proficiency. 5% of participants in the MD group completed the FOBT, compared to 76% in the LHE group. 30% were found positive. 75% in the MD group and 85% in the LHE group reported a gain in knowledge about CRC and CRS.

**Conclusions:** Despite adequate interpreter services, Chinese immigrants in this study were significantly less likely to comply with FOBT despite an understanding of the risks and benefits of the test. In stark contrast, the same program delivered by a peer educator (a respected member of their community) resulted in an extremely high FOBT compliance. Given the high rates of positive FOBT in this population, this study highlights the importance of community based and community directed education in hard to reach populations.

#148

**Disparities in Colorectal Cancer Cases at a University Based Hospital.**

*Karen E Kim, Brenda Huskey*

**Background:** Colorectal cancer (CRC) is the second leading cause of cancer death in the United States. Disparities in incidence, treatment, mortality and survival among different racial and ethnic groups has long been recognized but poorly defined and understood. This study reviewed all colorectal cancer evaluations at a university based hospital in order to identify potential disparities between differing populations, based upon reported race and ethnicity.

**Methods:** Data from the University of Chicago Cancer Registry of all colon and/or rectal cancers diagnosed and/or treated at the University of Chicago between 1948-2003 were analyzed. CRC were subdivided by race, average age, % found in stage 1 or 2, and % of right sided cancers, and were calculated for each racial group. **Results:** A total of 7424 patients were diagnosed and/or treated for colorectal cancer. The majority of colorectal cancers were identified in Whites (65%), followed by Blacks (31%) and by Asian (1.9%). No category for Hispanics could be identified. Table 1 lists all CRC broken down by race, age, early stage (right sided) and location. **RACE %total Av Age Stage 1-2 %Right side**  
White 65% 61 40.6% 23% Black 31% 67 44% 41% Asian 1.9% 52 32.8% 26% Hispanic 0%

**Conclusion:** The extremely low representation of Asian Americans and Hispanic populations compared to non-Hispanic Whites at our university based hospital is striking. The fact that Hispanics and Asians account for 20% and 6% of the Cook County population, respectively, further magnifies these disparities. As previously reported, Blacks had a significantly greater number of right sided cancers compared to other groups. Interestingly, Asians had a younger presentation of CRC and a lower percent with early stage disease. Future studies are needed to better understand these observations. This study emphasizes the need for accurate race/ethnicity reporting, and addresses the need for improved patient access to and navigation through University hospitals. Colorectal cancer remains the third most common cancer among all populations, and studies to eliminate disparities in CRC must include special populations.

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#149

**The Relationship of Body Size to Participation and Success in a Fruits and Vegetables Intervention among Low-Income Women**

*Ann Carroll Klassen, Elizabeth Garrett-Mayer, Sharada Shankar, Peter Houts, Celeste Marie Torio*

The Healthy Living Through Education (HLTE) project was an American Cancer Society- funded, community-focused, small-group educational intervention to increase fruit and vegetable consumption among women in public housing communities in Washington, D.C. Participants were African-American women ages 20 to 50, and 49% were obese, having a body mass index (BMI) > 30. Here, we focus specifically on how body size was related to participation and success in this program.

**Methods:** Participants attended seven 90-minute sessions held in community centers, and participated in small-group skill-building dietary activities, led by a professional nutritionist. Face-to-face interviewer-administrated questionnaires and 3 non-consecutive 24-hour recalls were collected at enrollment, post-intervention, and 4 month follow-up. Data analysis compared baseline psychosocial characteristics and dietary patterns between obese and non-obese women. Multilevel random effects models were used to measure change in diet at post and long-term follow-up for obese and non-obese high attenders.

**Results:** At baseline, obese participants had greater psychosocial barriers to dietary change, but also greater commitment to the program, and better attendance patterns than non-obese women. High attending obese women showed greatest dietary improvement post intervention (+1.1 servings of fruits and vegetables, and - 350 calories), but only non-obese women showed dietary improvement at long-term follow-up (-600 calories). Results suggest that, within low resource communities, interventions to change individual dietary elements such as increasing fruits and vegetables should be tailored to overall food consumption patterns, but also to participant body size and related psychosocial needs.

#150

**Using a Theory-Based Database to Track and Assess the Cancer Prevention and Control Activities of Community Coalitions in Northern Appalachia, 2002-2004**

*Brenda C Klusman, Marcyann Bencivenga, Eugene J Lengerich*

**Background:** Research shows that Appalachia, a 13-state region following the Appalachia Mountains in the eastern United States, has elevated incidence rates of colorectal, cervical, and lung cancer. The Appalachia Community Cancer Network at the Pennsylvania State University (NACN), including 11 coalitions representing 15 counties of rural Pennsylvania and New York, seeks to reduce cancer disparities through participatory research, education, and training. Assessing coalition strategies to reduce cancer disparities requires complete and accurate data, yet few such efforts are reported in the literature. In 2000, we developed a theory-based, data collection system to systematically track the capacity-building and cancer control activities of NACN coalitions. This study examines whether the NACN data collection system can assist in documentation and analysis of coalition cancer control efforts and facilitate future research. **Methods:** We used descriptive analyses to produce frequency tables of coalition trainings, development and funding activities, and community education and screening interventions of 10 coalitions having complete data for the 2002-2004 study period. We then combined the data with qualitative descriptions to produce coalition profile reports and return the data to the coalitions.

**Results:** Over 2 million persons were reached through 1,097 interventions. Colorectal cancer was the leading targeted cancer site. Of 3,653 individuals attending screening programs, 1,873 (51.3%) were screened. Four community changes were documented; however, this number is likely an underestimate of the screenings that resulted from the interventions. We conclude that the NACN data system can assist documentation and analysis of coalition cancer control outcomes and spawn new research interventions. With modifications, the NACN database can be used by other researchers and communities to track, assess, and compare strategies to improve community cancer health outcomes.

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#151

**Cancer Disparities Among Alaska Natives - 35 Year Perspective**

*Anne P Lanier, Janet J Kelley, Marie J Lavigne*

**Background:** Prior to the mid-1900's, cancer was considered a rare disease among Alaska Native people. The Alaska Native Tumor Registry has recorded complete cancer incidence data back to year 1969. More recently, this registry has become a participant in the National Cancer Institute's Surveillance, Epidemiology and End Results Program, which tracks cancer incidence nationwide.

**Purpose:** To identify the level of cancer disparities between Alaska Natives and other US populations.

**Methods:** We reviewed cancer data for the 35-year period, 1969-2003 and compared age-adjusted incidence and mortality rates to other US population rates. Statistical comparisons were performed using an odds ratio and associated confidence intervals.

**Results:** Cancer is now the leading cause of death among Alaska Natives. Mortality rates are 30% higher than USW, and incidence rates for all cancers are somewhat higher among AN women, but slightly lower among AN men. Dramatic increases are documented for cancers of the lung, breast, and prostate. Only cancers of the gallbladder and cervix have declined since the initiation of the registry. The pattern for site specific cancers is unique: AN rates exceed USW for cancer of the nasopharynx, digestive tract, and kidney, but, despite increases, AN rates remain lower for melanoma, breast, uterus, lymphoma and leukemia. Of importance is that rates for childhood cancer (<age 20) do not exceed USW. In comparison with other racial groups including American Indian tribes, AN cancer rates are among the highest. Comparison of incidence rates of Indians of Alaska with those in New Mexico, document nearly a two-fold difference, although both groups have higher stomach and gallbladder rates than USW.

**Conclusion:** Overall cancer mortality and certain cancer site incidence rates among Alaska Natives exceed those of US Whites and most other racial and ethnic minorities in the United States.

#152

**Adherence to Colorectal Cancer Screening Guidelines among African Americans: A Theoretical Approach to Understanding Barriers and Facilitators to Screening**

*Catalina R Lawsin, Katherine DuHamel, Lina Jandorf*

**Background:** African Americans (AAs) experience the highest incidence rates of colorectal cancer (CRC) in the U.S.

**Rationale:** To date, no study has utilized theoretically based measures to understand participation in CRC screening among AA men and women or included culturally relevant constructs, such as fatalism.

**Purpose of Study:** Guided by the health belief and transtheoretical models (TTM) of behavioral change, this study explores factors associated to stage of adoption of CRC screening procedures and adherence to CRC screening guidelines among AAs.

**Methods:** One hundred and fifteen AA men and women, 51 years and older (51-92), and at average risk for CRC participated in this study at an ambulatory care center located in an urban hospital center. Participants completed measures of sociodemographic information, medical factors (cancer history, frequency of physician visits), psychosocial factors (physician recommendation and influence regarding CRC screening, knowledge of CRC screening, perceived risk, fatalism), and TTM factors (pros and cons to screening, decisional balance). Outcome variables were stage of adoption (precontemplation; relapse; action/maintenance) and adherence to CRC screening, based on 2005 ACS screening guidelines.

**Results:** Univariate analysis revealed that psychosocial and TTM factors were significantly associated with both outcome variables. Fatalism did not prove to be a significant predictor of CRC screening. The logistic regression models revealed only knowledge of CRC screening and physician recommendation were significantly associated with stage of adoption ( $P<.001$ ). For adherence, the logistic regression revealed that knowledge of CRC screening ( $P<.01$ ), physician recommendation ( $P<.001$ ), and avoidance of the health care system ( $P<.05$ ) remain significant.

**Implications:** This study confirmed the relevance of stage theory to understanding CRC screening among AAs. Results demonstrate the importance of both patient and provider factors to CRC screening among this population.

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#153

**Recent Trends In Cervical Cancer Incidence And Survival Among Vietnamese Women In California, 1988-2002: Indicators Of Progress**

*Gem Le, Myles Cockburn, John Chan, Phuong Nguyen, Anita Sit, Scarlett Gomez*

Previous data have shown that incidence of cervical cancer is highest in Vietnamese women in the US. However, little is known regarding incidence trends and survival rates in this racial/ethnic group over time. We aimed to analyze recent trends and progress in cervical cancer incidence and survival among the Vietnamese women in California. Using data from the California Cancer Registry, age-adjusted incidence rates were computed by race/ethnicity for patients diagnosed with histologically confirmed invasive cervical cancer during the period 1988-2002. Hazard ratios and 95% confidence intervals were estimated using the Cox proportional hazards model. Vietnamese women (n=440) were diagnosed at a mean age of 55 years and were significantly older than women of other racial/ethnic groups. During the fifteen-year period, all racial/ethnic groups experienced a decline in the incidence of cervical cancer. However, the decrease in incidence was most pronounced in Vietnamese women, dropping nearly 60% from 21.9 (95% CI: 16.4-29.8) to 8.8/per 100,000 females (95% CI: 6.3-12.7). The decrease in rates was primarily limited to Vietnamese aged 45-65, which consisted of largely foreign-born women. Relative to non-Hispanic white women, the HR for Vietnamese was 0.77 (95% CI: 0.62-0.95), indicating that Vietnamese women had a statistically significant lower risk (hazard rate) of cervical cancer mortality, after adjusting for sociodemographic and clinical characteristics. Despite high rates of cervical cancer among Vietnamese in the early 1990's, rates have decreased substantially in the last fifteen years for which data are available. Survival following cervical cancer is higher in Vietnamese women than in non-Hispanic white women. Factors leading to this decrease in incidence and improved survival may include improvements in cervical screening, utilization and adherence, cohort/migration effect, and changing biologic and environmental factors.

#154

### **SpiritED: Sisters Peer-counseling In Reproductive Issues after Treatment: Examining Differences—Are the Helpers Helped?**

*Michelle Simone Marion, Leslie R Schover*

**Background:** African American women are at greater risk for negative sexual/reproductive sequelae of cancer treatment. Therefore, we partnered with Sisters Network® Inc, to implement a peer counseling intervention (SPIRIT) to address the reproductive, sexual, and emotional health problems facing African American breast cancer survivors. Pilot data revealed the program produced significant gains in knowledge, emotional distress, menopause symptoms, and sexual function.

**Rationale:** Although the use of peer counselors has been a staple for years, there is little information about the impact of being a peer counselor. Related to SPIRIT, we do not know how the intensive training to become a peer counselor has impacted the counselors' sexual, reproductive, and emotional health.

**Purpose:** The purposes of the study are to 1) compare the reproductive health outcomes of peer counselors with those of participants; 2) identify characteristics that distinguish successful counselors from those with less success; and 3) describe counselors' experiences.

**Methods:** Counselors complete the same measures as SPIRIT participants to assess outcomes: emotional distress (*Brief Symptom Inventory*), sexual function (*Female Sexual Function Index*), menopausal symptoms (items from the *Breast Cancer Prevention Trial Symptom Checklist*), a survey on having children after cancer, and a Knowledge Test. Additionally, we measure sexual self perception and the presence of life stressors. We also interview counselors about their experiences. Power analyses were conducted. Quantitative data will be analyzed using the matched paired t test and qualitative data will be analyzed using content analysis.

**Results:** To date, we have enrolled approximately half of eligible participants in the study and have completed data on one-third of these participants. We expect to have preliminary results by March 2006.

**Implications:** The knowledge gained about counselors can be used to design more effective, targeted interventions for the African American population. These types of interventions will make a needed service available at low or no cost to African-American breast cancer survivors (and other populations) around the United States.

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#155

### **Colorectal Cancer Screening in Vietnamese Americans**

*Bang Hai Nguyen, Susan Stewart L, Stephen McPhee J, Hiep Doan T*

**Background:** Colorectal cancer is the third most common cancer in both Vietnamese men and women. Rates of colorectal screening among Vietnamese Americans are lower than non-Hispanic whites and the general population.

**Methods:** A cross-sectional sample of 867 participants was drawn from a sampling frame consisting of all individuals in the Alameda and Santa Clara Counties, California and Harris County, Texas area telephone directories with Vietnamese surnames. The telephone survey included questions regarding demographics, healthcare characteristics, and knowledge, attitudes, and behaviors of colorectal cancer and screening. The dependent variables were colorectal cancer screening test 1) recognition, 2) receipt, 3) currency, and 4) intention, defined, respectively, as the proportions of the respondents who reported 1) having heard of, 2) having ever had, 3) being up-to-date for, and 4) planning to have a fecal occult blood testing (FOBT), a sigmoidoscopy, or a colonoscopy. Frequency distributions were tabulated for demographics, health care characteristics, knowledge and attitudes, and colorectal cancer screening rates. Multiple logistic regression models were developed to identify factors associated with colorectal cancer screening.

**#155 (continued)**

**Results:** Colorectal cancer screening recognition, receipt, currency, and intention rates in Vietnamese Americans aged 50 to 74 were low. Only half (55%) of the respondents recognized FOBT and only about a third recognized sigmoidoscopy (40%) or colonoscopy (36%). Receipt and currency rates were very low for sigmoidoscopy (20% and 16%, respectively) and colonoscopy (26% and 23%, respectively). Although the FOBT receipt rate (48%) was higher, the FOBT currency rate (25%) was low. The rates of intention to accept colorectal screening tests were high (ranging from 75% to 85%), but the rates of intention to ask for a colorectal screening test were very low (ranging from 21% to 26%).

**Implications:** While screening rates are low, Vietnamese Americans are receptive to screening if providers recommend for it. Vietnamese providers, who serve much of this population, need training to recommend and provide these screening services. A community-wide education campaign is needed to reach the Vietnamese American public.

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**#156**

**Increasing African American women's Participation in breast cancer screening program: Putting Research into Action, "Taking Care of Ourselves and Each Other"**

*Jodi Lynn Olson*

African American women have higher mortality rates from breast cancer in Washington State. The Washington Breast and Cervical Health Program's (WBCHP) goal is to reduce breast and cervical cancer mortality among uninsured women with limited incomes. The literature describes barriers to mammogram screening for African-American women who decided to have the screening. This study is the first to identify beliefs of women who decided not to have a mammogram. This is a population-based study of African-American women reached through outreach who did not have a mammogram. Face-to-face interviews were conducted with 43 women. Data were processed using methods described by Glaser and Strauss: establish units of analysis, group by category and develop explanatory theory. An education module including videotapes was designed to address key issues distilled from the study and confirmed by discussion groups. The video represents different backgrounds, giving a voice to all African American women. Staging techniques from the transtheoretical model and motivational interviewing are used. Training for health care providers was designed to identify practice improvements. Interviewees offered rich text describing beliefs about breast cancer and mammography that formed the basis for their decisions to not be screened. Their beliefs ran counter to many assumptions of breast cancer screening programs. The communication plan will be evaluated over 18 months for impact on screening. Using education messages designed to address the beliefs of this sub-group of women will increase and improve screening and earlier stage diagnoses. Proven methods will be integrated into outreach work plan. There is an opportunity to showcase this film at the conference. The film portrays eight African American women and their view on mammograms, breast cancer and health care.

#157

### **Using Community-based Participatory Research to Reduce Disparities in Cervical Cancer among Appalachian Women in Ohio**

*Electra Diane Paskett, Mary Ellen Wewers, Mack Ruffin*

**Background:** Cervical cancer remains a problem for certain regions of the U.S. One of these regions is the Appalachian area, defined by geographic and cultural parameters.

**Rationale:** Both incidence and mortality rates for cervical cancer in Ohio Appalachia are 2-3 times higher than the rates in the U.S.

**Purpose:** To understand and try to reduce cervical cancer rates in Ohio Appalachia, The Ohio State University Center for Population Health and Health Disparities (OSU CPHHD) was established.

**Theoretical approach:** The Center uses Marmot and Wilkinson's Social Determinants of Health theoretical framework to identify and address issues at three levels of assessment and intervention: environmental, behavioral and biologic.

**Methods:** Three inter-related projects focus on the three causes of cervical cancer – lack of Pap tests, tobacco use and HPV infection. Community-based participatory research (CBPR) techniques are an important part of this Center and have been used to (1) gain an understanding of relevant issues related to exposures, screening and cervical cancer from women; (2) identify clinics to participate; (3) hire field staff; (4) develop project material; and (5) develop recruitment methods.

**Results:** To date we have conducted focus groups; recruited clinics; hired staff; developed culturally appropriate materials and developed and implemented recruitment strategies.

**Implications:** As the project is introduced into the 16 communities, CBPR will guide other aspects of the activities. Using CBPR strategies will help address health disparities in Appalachian

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#158

### **The Lived Experience of the Partners of Long Term Breast Cancer Survivors: The Other Side.**

*Jody Pelusi*

As the number of women diagnosed with breast cancer continues to rise, so does the population of long-term breast cancer survivors. Many factors influence the overall outcome of their experience, one of which is the support from their partners. Much has been written in regards to the woman herself, but what is lacking in the literature are the voices of their partners during the long-term survival phase of the disease.

The purpose of this study was to conduct a phenomenological study to 1) describe the essential structure of the experience of being a partner of a long-term breast cancer survivors, and 2) compare theme patterns of the partners of long-term breast cancer survivors with those of long-term breast cancer survivors.

The sample reflected the views of males (71%) and female (29%) who identified themselves as Caucasian (43%), Afro-American (14%), Hispanic(29%) and API (14%).

The research method consisted of open-ended audiotaped interviews. Colaizzi's eight step method of analysis was utilized.

Ten theme categories were identified from the data: the invisible enemies-cancer and uncertainty, a sense of duty, constant vigilance, from dreams to reality, turning my eyes away but not my heart, paying the price, don't worry-be happy, who are we now, rebuilding our home and the everlasting journey. From these them categories, the essential structure of being the partner of a long term breast cancer survivor was identified.

To effectively support a woman through her cancer journey we must also support her partner. Needs of partners may be similar in some areas but very different in others. Understanding the needs of both the patient and partner will guide us in providing quality cancer care.

#159

**A Pilot Evaluation of Breast and Cervical Cancer Early Detection Program Needs for Serving Women with Disabilities**

*Susanne E Pickering*

**Background:** Due to unique and common barriers, disparities in preventive health services such as breast and cervical cancer screening for women with disabilities exist. Data indicate that 26 million U.S. women with disabilities (2004) are disproportionately represented among minorities, the elderly and the poor. These women are at equal risk of breast or cervical cancer, yet are less likely than women without disabilities to receive mammograms or Pap tests at recommended intervals.

**Rationale:** Evaluation of CDC funded state Breast and Cervical Cancer Early Detection Programs (BCCEDPs) to determine needs for screening these women has not previously been conducted.

**Methods:** A pilot program evaluation using a written survey was administered to nine of the 50 state BCCEDPs. These states were purposely selected based on 1) previous BCCEDP disability-related activity and 2) coexisting state CDC Disability and Health Program funding. Qualitative and quantitative data were compiled and analyzed using thematic categories and frequency counts.

**Results:** Results indicated opportunities to integrate improved cancer screening services for women with disabilities in the BCCEDPs. Barriers to implementation included 1) limited data on disabilities of women screened through the programs, 2) the eligible population of women with disabilities, and 3) healthcare provider training to screen these women. Programs lacked data on resource needs such as training and accessible examination tables to facilitate screening them.

**Conclusions:** Without a foundation of public health and program information, programs such as BCCEDPs cannot characterize the needs of women with disabilities within their eligible populations to support improved cancer screening services. Engaging partners, including disability programs, in evaluation, planning and implementation can guide national and state program decisions related to services for women with disabilities.

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#160

**Lost in Translation: The Communication Experiences of Low-Income, African-American Women regarding Abnormal Pap Tests and Follow-up**

*Irene P Prabhu Das, Donna Richter, DeAnne K Hilfinger Messias, Deborah Parra-Medina, Kathryn Luchok*

**Background:** Low-income African American women have significantly lower rates of follow-up (Abercrombie, 2001; Benard et al., 2005) and mortality rates among African American women are 2.2 times higher than White women. Incomplete or delayed follow-up for abnormal Papanicolaou (Pap) test results compromises the effectiveness of cervical cancer screening.

**Rationale:** The role of patient-provider communication in patient adherence to cancer screening and follow-up is an understudied area (Yabroff et al., 2004).

**Purpose:** The purpose was to explore the experiences and perceptions of patient-provider communication among low-income, African-American women identified as non-adherent for abnormal cervical cancer screening follow-up.

**Methods:** Our exploratory used purposeful sampling of low-income African American women enrolled in a cervical cancer screening program who were non-adherent to follow-up for abnormal Pap tests. We identified a pool of 24 eligible women and recruited 11 to participate. Data collection involved individual, in-depth interviews. Qualitative data analysis of the interview transcriptions included open coding, constant comparative analysis, and narrative interpretation.

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**#160 (continued)**

**Results:** Women had clear expectations of the communication roles of providers and of the type of information that should be offered. They judged clinical competence and quality of care by providers' verbal and non-verbal communication. Language and communication barriers contributed to distrust, fear, uninformed decision-making, as well as to a lack of comprehension and decreased satisfaction with providers and the quality of care provided. Implications: Intended messages and essential information often were lost in translation during the course of patient-provider communications. Interventions to improve patient-provider communication must be integrated into efforts to reduce the disparities in cervical cancer, morbidity, treatment and mortality among African American women.

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**#161****Cancer & Poverty in Colorado: 1995-2002**

*Mario M Rivera*

Cancer and Poverty is a report prepared on behalf of the Colorado Comprehensive Cancer Coalition. Most kinds of cancer can be prevented and/or detected at an early stage. Approximately two out of every three cancers deaths are caused by modifiable risk factors and/or failing to use cancer screening. These factors related to poverty, which is also a barrier to accessing effective cancer therapies. Understanding the influence of poverty on cancer risk and outcomes can assist in separating race and ethnicity factor from poverty factors, and in developing better cancer prevention and control strategies for financially disadvantaged persons. The purpose of this report is to examine the relationships between poverty and the known risk factors for cancer, incidence rates, early stage diagnosis, and survival with cancer in Colorado.

Cancer cases for the years 1995 to 2002 were included for this study. Cancer data from the Colorado Central Cancer Registry focuses on six cancer sites. The Behavioral Risk Factor Surveillance System, the U.S. Census Bureau, and the U.S. Preventative Services Task Force were also utilized. Cancer outcomes studied include age-adjusted incidence rates, the proportion detected at an early stage, and five-year survival rates. For all cancer combined, poorer areas had higher incidence rates of cervical, colorectal, and lung cancers and lower rates of breast, melanoma, and prostate cancers. The poorer the area, the worse the early stage detection, and the lower the survival. Differences in cancer outcomes that are apparent between various races/ethnicities are due to poverty. Efforts should reduce health disparities by ensuring access to quality health education, cancer screening, and cancer treatment, regardless of income.

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**#162****Factors Associated with Colorectal Cancer Screening Among African Americans in Church Settings**

*Isabel C Scarinci, Sharina Person, Mona Fouad, Andres Azuero, Collette Strother, Selwyn Vickers*

It has been shown that African Americans have the highest incidence of colorectal cancer (CC) than any other racial/ethnic group, and are less likely to engage in colorectal cancer screening (CCS) than Whites. Demographic variables, dietary habits, and sedentary lifestyle have been shown to be associated with the CC incidence. Health insurance coverage, having a regular source of care, income, and education have been shown to be associated with CCS practices. Objective: to examine the association between demographic (gender, education, and income) and lifestyle factors (sedentary lifestyle, fruit/vegetables consumption, and fried food consumption) and CCS among African Americans 50 years of age and older in church settings. Methods: A survey was administered to congregation members of four churches (N=607); 222 participants were 50 years of age and older (51 males and 123 females), but only participants having health insurance coverage and regular source of care were included in the analyses (N=202). Bivariate associations between CCS and demographic and lifestyle variables were examined. Variables found to be significant were included in final multivariable logistic regression models. Results: 27.5% of participants reported never having had a FOBT and 45.4% reported never having had colonoscopy/sigmoidoscopy. Income and education were the only variables significantly associated with CCS with both higher income and higher education being associated with increased likelihood of screening. After multivariable adjustment only income remained significantly associated with screening. Results show that among African Americans with health insurance and regular source of care, income is still an important variable to be considered.

#163

### Breast And Cervical Cancer Screening Among Latina Immigrants: How Can We Do It Better?

*Isabel C Scarinci, Lisa R Bandura, Catherine Brooke, Isabel Garces*

Sowing the Seeds of Health is a theory-based and culturally-relevant program to train lay health promoters (LHP) to disseminate health information and facilitate health care access among Latino immigrants in Alabama. LHPs receive extensive training on knowledge (e.g., breast cancer) and skills (e.g., communication) and develop their own action plan – breast/cervical cancer early detection. Studies have shown that Latina immigrants display lower frequency of Pap Smears (Paps) and mammograms than U.S.-born Latinas, and lack of transportation, money, health insurance, childcare, and language are the primary barriers. If we eliminate these structural barriers, would Latina immigrants attend cancer screenings? LHPs organized educational luncheons to promote breast/cervical cancer early detection, and participants were given the opportunity to receive low-cost Paps and free mammograms. Childcare, interpreters, and transportation were provided; women who attended their Paps and/or mammograms received a \$10 gift certificate. Results: Out of 257 low-income Latina immigrants who attended the luncheons, 198 expressed interest in having a Pap, 77.3% attended their appointments; 68 women 40 years of age and older expressed interest in having a mammogram, 77.9% attended their appointments. Education was significantly associated with attendance to Paps and mammograms. Frequency of past Paps/mammograms, length of time in the U.S., marital status, employment status, having children, and getting regular medical care were not associated with attending their Pap/mammograms. Results show that appropriate training of trusted community volunteers can have a major impact in cancer prevention efforts among Latina immigrants. Program development and implementation and lessons learned will be discussed.

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#164

### The American Indian/Alaska Native Cancer Survivor's Voice

*Tracy A Schroepfer, , Jackie Matloub*

**Background** Very limited information is available on the quality of cancer care received by cancer patients, particularly information from cancer survivors themselves. Even less information is available on the quality of cancer care received by American Indian/Alaska Native (AI/AN) cancer survivors.

**Purpose of Study** The purpose is to advance knowledge on the quality of the cancer journey taken by Northern Plains AI/AN cancer survivors, a region shown to have significantly higher cancer mortality rates than either the overall Indian Health Service or United States rate. The study sought to provide respondents the opportunity to voice their experience along the continuum of cancer care.

**Methods** A convenience sample was obtained of 61 cancer survivors attending a regional health conference. Fifty-two respondents identified themselves as American Indian/Alaska Natives from multiple tribes. A mixed methodology approach was used in designing a self-administered survey included in the registration packet distributed at the conference. Descriptive analyses were conducted on the quantitative survey data, and an inductive method used in locating themes which emerged from repeated readings of the qualitative data.

**Results** revealed positive aspects to the participants' cancer journey, as well as challenges they experienced. An overwhelming majority felt that their doctor made sure they understood their condition, what they should do regarding treatment, listened to their concerns, and took them seriously; however, limitations regarding insufficient health insurance coverage, transportation and lodging posed barriers to treatment.

**Implications** This research identifies the need for assessing the cancer care resources available to Northern Plains tribes. Knowledge of these resources, as well as additional research to clarify existing cancer health disparities, will guide efforts to improve quality of cancer care for AI/AN populations.

**#165**

**Implementing a City-Wide Patient Navigation Research Program in the District of Columbia**  
*Francisco Semiao, Steven Patierno*

**Background:** The District of Columbia is unique in that minority populations are the majority (62% African American and 4-10% Latino) and are the fastest growing minority in the area, and it has the highest per capita breast cancer mortality in the US. African American women in DC are twice more likely to die from breast cancer than white women despite the same or higher rates of screening mammography. Similarly, Latinas have a rate of screening mammography only slightly lower than non-Hispanic white women, but they present at later stages of the disease.

**Rationale:** These disparities suggest barriers and problems navigating the health-care system, both to find timely diagnostic services and to get complete, high-quality care after diagnosis.

**Purpose of Study:** To address these problems, with the goal of reducing these disparities, four of the major medical institutions in the District of Columbia are collaborating with two community partners and the DC Department of Health in an unprecedented consortium to create a city-wide navigator program that will evaluate different ways of helping African American and Latino women navigate the health-care system.

**Theoretical Approach:** The aim is to conduct a randomized controlled trial comparing "standard-concrete navigation" with standard navigation plus enhanced navigation consisting of linguistically competent peer counseling.

**Methods:** The outcomes of the trial are time between a suspicious finding or an accurate diagnosis to treatment. Secondary outcomes are the cost per woman navigated, cost per completed treatment, and cost per quality-adjusted life year saved. Navigators will address access-related factors including system barriers, financial barriers (including lack of health insurance), physical barriers (lack of transportation and child-care assistance), information and education barriers, language barriers, and cultural issues.

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**#166**

**Determining the strength of the scientific evidence supporting consensus strategies for reducing health disparities found in the Maryland Comprehensive Cancer Control Plan.**  
*Salma N Shariff-Marco, Karen Robinson, Michael Chris Gibbons, Kathy Heiltsouer*

The Maryland Comprehensive Cancer Control Plan (MCCCCP) is a "call-to-action" for cancer control in Maryland. In the plan, strategies were recommended to reduce cancer disparities. The Maryland Department of Health and Mental Hygiene would like to prioritize the implementation of these strategies based on the available scientific evidence. The presentation will include a description of the process that was developed as well as an overview of the evaluation of the evidence supporting the strategies in the cancer disparities chapter. Using an iterative process, a team of content and evidence-based health care methodology experts developed a systematic approach to identify and analyze the evidence addressing each strategy. The study design involved dissecting the strategies into key terms and conducting a search for evidence-based guidelines, systematic reviews and other guidelines that addressed these key terms. The conclusions were then abstracted from the citations and classified by strength of support for each strategy. This enabled a rank ordering of the strategies by level of scientific support within the data synthesis process. The strategies focus on a wide range of issues such as public education, community health workers, and minority recruitment of health care providers. Evidence supporting these strategies ranged from "not in support" to "strong support". While significant gaps in knowledge exist, this work will inform the process of implementing proven strategies to reduce cancer disparities. This novel approach will assist state health officials, policy makers and health practitioners translate research into action.

**#167**

**African American Women and the Roles of Religion and Spirituality throughout the Breast Cancer Experience**

*Cassandra Elizabeth Simon, Hyoung-Kyoung Higgerson, Martha Crowther*

Gaps in the breast cancer literature clearly demonstrate that there is a need for research that focuses on the breast cancer experiences of African American women. The literature makes clear that a breast cancer diagnosis has a profound effect on the psychosocial well being of those diagnosed. Finding ways to meet their needs and help them cope is of extreme importance. This study presents the results of semi-structured interviews conducted with 18 African American Christian women regarding the role of spirituality throughout their breast cancer experiences. The spiritual themes relevant for various phases of the breast cancer experience are identified. Analysis resulted in the identification of 11 codes and 5 sub-codes that corresponded to the diagnosis, treatment, and post-treatment phases of the breast cancer experience. Most of the survivors indicated that their spirituality and faith assisted them throughout the breast cancer experience. Discussion focuses on the spiritual resources used by the participants at the different stages in the breast cancer experience. Attention is also given to how professionals can use these resources to assist African American women coping with breast cancer.

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**#168**

**Racial differences in breast cancer survival in the Detroit Metropolitan Area**

*Michael Steven Simon, Mousumi Banerjee, Anne-Michelle Noone, Kendra Schwartz, Heather Crossley-May, Fawn D Vigneau*

African American (AA) women have poorer breast cancer survival compared to Caucasian American (CA) women. The purpose of this analysis was to determine whether socioeconomic status (SES) and treatment differences influence racial differences in breast cancer survival. The study population included 9,597 women (82% CA, 18% AA) diagnosed with local (63%) or regional (36%) stage disease between 1988 and 1992, identified through the Metropolitan Detroit SEER registry. Data on SES were obtained through linkage with the 1990 Census of Population and Housing Summary Tape and cases were geocoded to census block groups. Pathology, treatment and survival data were obtained through SEER. Cox proportional hazards models were used to compare survival for AA versus CA women after adjusting for age, SES, tumor size, number of involved lymph nodes, and treatment. AA women were more likely to live in a geographic area classified as working poor than were CA women ( $p<0.001$ ). AA women were less likely to have lumpectomy and radiation and more likely to have mastectomy with radiation ( $p<0.001$ ). After multivariable adjusted analysis, there were no significant racial differences in survival among women with local stage disease, although AA women with regional stage disease had persistent but attenuated poorer survival compared to CA women. After adjusting for known clinical and SES predictors of survival, AA and CA women who are diagnosed with local disease demonstrate similar overall and breast cancer-specific survival, while race continues to have an independent effect among women presenting at a later stage of disease.

#169

### **Building Upon Cultural Strengths of Native American Communities in New Mexico: A Partnership to Fight Cancer**

*Michele Suina, Jane Cotner, Joyce Naseyowma-Chalan, Gayle Diné-Chacon, Maria Otero, Kristina Flores*

Cancer incidence is increasing among Native Americans and the five-year survival rate for those diagnosed is lower than other racial group in the United States. In New Mexico (NM), Native Americans are diagnosed with later stage cancer more than other races/ethnicities. NM is home to 22 tribes in rural regions throughout the state. In order to address cancer concerns among tribal communities a partnership between tribes/tribal health workers, the University of NM Cancer Center, University of NM Center for Native American Health and NCI's Partnership program was established to: 1) train tribal community health workers in delivery of NCI's "Cancer 101 for Native Americans" curriculum; and 2) modify the curriculum to build upon and reflect the unique cultural strengths of NM tribes. A cancer education training team comprised of five community health representatives (CHRs) from Navajo Nation and Laguna, Zia, Cochiti and Acoma pueblos, UNM staff and NCI Partnership Program staff trained in the delivery of and modified the curriculum over a three-month period. In June 2005, the team delivered a targeted training to approximately 30 tribal CHRs from around the state with dissemination to respective tribal communities. Outcomes to date include: 1) improved rates of cancer awareness and knowledge among trainees (pre-post tests); 2) training in general cancer education for 35 tribal health workers; and 3) subsequent requests for on-site tribal education (Zuni, Acoma, Laguna, Cochiti pueblos). Potential long-term outcomes for future evaluation include increasing continuing education for CHRs, culturally-relevant cancer modules for NM tribes, increased uptake of cancer screening, increased interest/referrals to clinical trials and improved survival rates for tribes.

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#170

### **Reaching Urban American Indians with Cancer Information: Partnerships, Educational Tools, and Community Involvement.**

*Zul H Surani, Lourdes Baezconde-Garbanati, Vanessa Watts, Brian Montano, Jennifer Metz*

Cancer is the second leading cause of death for American Indians in the U.S. Cancer incidence is relatively low among American Indians and Alaska Natives (AI/AN), but survival rates from it are the lowest in the nation compared to other groups. In California, 40.5% of American Indian women are not compliant with mammography screening recommendations according to the California Health Interview Survey (CHIS). Los Angeles County has the largest American Indian (AI) population in the state of California (2000 Census), and one of the largest AI populations in the U.S. Partnered for Progress/Los Angeles County Cancer Detection Partnership (CDP) in collaboration with NCI's Cancer Information Service California Region, Southern California Partnership Program Office at USC has developed an initiative to reach urban AI communities. The goal and purpose of this initiative is to explore how AI women who need mammography screening can be reached and educated by building a sustainable community infrastructure and providing culturally-specific educational tools, and capacity building assistance to organizations. We will present results of outreach to the community organizations, training, capacity building efforts and the use of culturally specific cancer education tools. We expect that these efforts will result in the development of an American Indian community taskforce, breast cancer education program plan and increased organizational capacity and resources to sustain cancer education programs in Los Angeles County.

#171

**Weaving an Islander Network for Cancer Awareness Research and Training (WINCART): Community-Based Participatory Research and Network Analysis**

*Sora Park Tanjasiri, Paula Healani Palmer*

Community-Based Participatory Research (CBPR) has become more common in recent years, however little has been documented on how to reduce racial and ethnic health disparities through this method. In addition, while collaboration seems to be effective; there is little documentation on what aspects of collaboration contribute to improved public health outcomes (Valente et al, 2005 in press). Network analysis is a method that can assess coalition performance by looking at inter-organizational relationships and their processes; gaining a better understanding of the relationships within the network (Valente et al., 2005, in press). A sociometric survey assessing inter-organizational relationships was completed by WINCART partners and their respective organizational members. All members of the network and their respective members were invited to participate. In total 120 individuals were identified to complete the network analysis survey. At minimum, one individual from each organization or agency completed the survey indicating the network in which they conduct cancer prevention, screening, and treatment activities. The data were collected and converted into a matrix which was graphed providing a visual presentation of the connections among agencies, organizations, and individuals. Network indicators such as density (the proportion of connections in the network), centralization (the degree ties are concentrated in one or a few organizations), centrality (degrees to which organizations have the most connections) and bridging were linked to attributes of the various organizations to determine the factors associated with network position. WINCART will contribute the lessons learned from an academic and community collaborative effort by providing data on how academic and community groups collaborate and coordinate their efforts to reach common goals. The analysis will show the effects and importance of social networks in functionality and effectiveness of CBPR.

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#172

**Optimization of Medical Sequencing Verification Protocols**

*Erica W Taylor, Steve Scherer, Debra Murray, George Weinstock, Richard Gibbs*

Epilepsy is a common neurological disorder that affects 2-4% of the general population. Most cases of epilepsy are classified as idiopathic and genetic linkage studies have suggested that a number of ion channel genes may be involved in Idiopathic Generalized Epilepsy (IGE). Genetic susceptibility to IGE is probably due to the cumulative influence of common and rare polymorphisms within multiple interacting ion channel genes, which in turn change the excitability characteristics of neurons. The goal of the Ion Channel Resequencing Project is to identify Single Nucleotide Polymorphisms (SNPs) associated with IGE by screening over 250 ion channel genes in 500 cases and 500 controls. The screening has thus far led to the identification of 2500 SNPs, with 200 being classified as novel and non-synonymous. To identify a universal method of verification for SNPs discovered using sequencing of PCR amplified exons, we evaluated the TaqMan Genotyping SNP Assay (TaqMan) and Pyrosequencing by testing 20 novel, non-synonymous SNPs against 34 patient samples. The methods were compared to each other based on results and cost and compared to the original sequence traces for correspondence. Initial TaqMan results generated five functional assays and optimization is in progress on the remainder. Pyrosequencing produced more promising yields, and correspondence analysis is ongoing. The verification of called SNPs is vital in identifying which SNPs are to be studied using functional assays. These results will ultimately shine light on the molecular basis of IGE as well as providing a tool to be used in further medical sequencing projects.

**#173**

**Cervical Cancer Screening Rates among Foreign Born Women by Region of Origin**  
*Jennifer Tsui, Mona Saraiya, Trevor Thompson, Achintya Dey*

**Introduction:** Cervical cancer mortality rates have increased among foreign-born women in the United States. Previous research indicates lower Pap testing rates among foreign-born women. Limited information exists on how screening rates vary among foreign-born women by region of origin.

**Methods:** We used self-reported data from the 1998, 1999, 2000 and 2003 National Health Interview Surveys, a nationally representative survey of non-institutionalized civilian adults, to report Pap testing rates (ever and recently screened) by birthplace (Mexico, Central America, Caribbean, South America, Europe, Russia, Africa, Middle East, India, Asia, and Southeast Asia) and percent lifetime in US for women 18 years old or older (n=70, 775). Rates were age-standardized to the 2000 US standard population.

**Results:** Among the 12% or an estimated 12.3 million foreign born women in the study population, 69.7% (95% CI 65.8, 71.7) of recent immigrants (less than 25% of lifetime in US) and 86.5% (95% CI 85.2, 87.8) of established immigrants (more than 25% of lifetime in US) received a Pap test in their lifetime compared to 93.0% (95% CI 92.8, 93.2) of US born women. Prevalence of Pap testing was lowest among women from Asia and Mexico. Similar differences in recently screened rates exist between foreign-born and US born women.

**Conclusion:** Significant differences exist in cervical cancer screening rates between foreign-born groups and within foreign-born groups based on time spent in the US. Nationally and locally funded screening programs may benefit from these findings in developing screening strategies for foreign-born women from high-risk areas less likely to receive preventive care.

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**#174**

**Disparities in Chronic Health Conditions among older Puerto Rican women in Boston**  
*Katherine Tucker*

We identified significant health disparities, particularly among Puerto Rican women relative to non-Hispanic white women, in a representative survey of Hispanic adults, aged 60+ y, in the state of Massachusetts. Puerto Rican women were more than twice as likely to have type 2 diabetes and depressive symptomatology relative to non-Hispanic white women. They were also significantly more likely to have difficulty with activities of daily living and to show evidence of cognitive decline. Nutritional evaluation showed greater prevalence of low plasma vitamin B12 and serum ferritin, and dietary intakes high in refined carbohydrate with low diversity and nutrient density. Poverty and language isolation were prevalent in this mainly island born group of Puerto Rican women. In response to these observations, we developed the Boston Puerto Rican Center on Population Health and Health Disparities, with the hypothesis that continual stress leads to high "allostatic load" or wear and tear on the body that, along with poor nutrition, leads to the earlier appearance of chronic conditions. This will be examined in a longitudinal cohort of more than 1000 Puerto Rican adults, aged 50-75 years at baseline. Genetic analyses are included to examine diet-gene interactions in relation to health risk. An ethnographic component will aid interpretation of quantitative data, and pilot nutrition interventions, with multivitamins and with fruit and vegetables, will be completed on subgroups. We expect the results of this research to contribute to programs to reduce health disparities for this high risk group.

#175

### Racial/Ethnic Disparities In Definitive Treatment For Clinically Localized Prostate Cancer

Willie Underwood, Susan Eggly, Louis A Penner, Terrence L Albrecht

Prostate cancer accounts for 33% of all newly diagnosed cancers; further, there are projected to be 232,090 incident cases of and 30,350 deaths from prostate cancer in 2005. Compared to whites, African American men (AAM) are at greater risk for both developing and dying from this cancer. Although the higher mortality among AAM may be secondary to inherent genetic differences, disparities in the utilization of definitive therapy may also contribute to the observed disparity in mortality. Therefore, we sought to describe the use of definitive therapy for localized/regional prostate cancer among white, Hispanic and AAM.

**Methods** The sample included 142,340 men with localized/regional prostate cancer (81.6% white, 6.4% Hispanic, and 12.0% African American) identified in the national Surveillance, Epidemiology and End-Results registry (SEER) diagnosed between 1992-1999. Multivariate regression models were used to determine the odds of receiving definitive treatment by race/ethnicity adjusting for age, marital status, tumor grade, and SEER site. In order to determine the relationships between race/ethnicity and clinical determinants of treatment, we developed multiplicative models including interactions between race and age, grade and SEER site.

**Results** Overall, the odds of receiving definitive therapy for Hispanic and AAM diagnosed with moderately differentiated grade cancers were 0.84 and 0.64, respectively, compared to white men. Among men diagnosed with poorly differentiated grade cancers, the odds of Hispanic and AAM receiving definitive therapy were 0.77 and 0.49 respectively.

**Conclusions** Significant treatment disparities were noted in men with the higher grade cancers. Our finding of racial/ethnic disparities in definitive treatment varying by tumor grade provides an important link between racial/ethnic disparities in treatment, the racial/ethnic disparities in disease characteristics and racial/ethnic disparities in prostate cancer mortality.

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#176

### Evaluation of the impact of a culturally-tailored educational video on changes in breast cancer related behaviors in Chinese women

Judy Wang, WENCHI LIANG, Marc D Schwartz, Marion M Lee, Barbara Kreling, Jeanne S Mandelblatt

**Introduction.** Chinese women have among the lowest breast cancer screening rates in the US. Few intervention programs have been designed to overcome their cultural and attitudinal barriers to screening mammography. This study was to develop and evaluate a culturally-tailored educational video guided by the Health Belief Model to promote Chinese women's use of mammography.

**Method.** This study included three phases: 1) focus-group discussions (n=36, age>39) and an advisory board meeting including Chinese community leaders and cancer survivors to guide the video development, 2) producing the video with Chinese community actors, and 3) conducting a pre-post test pilot to evaluate the efficacy of the video in changing knowledge, beliefs, and screening intentions among Chinese women (age>39) who were not adherent to current NCI mammography guidelines (n=50).

**Results.** A 17-minute video was produced in Mandarin and dubbed with Cantonese voices. The video included a soap-opera addressing barriers to screening and a segment with a physician recommending screening. Our preliminary evaluation of the video showed that compared to 37% at baseline, 88% of the participants intended to obtain a mammogram after viewing the video ( $p<.0001$ ). There were significant increases in knowledge about breast cancer and mammography ( $p = .001$ ) and decreases in Eastern cultural views of cancer ( $p<.0001$ ). More than 84% of the women liked the video and said it was understandable, persuasive, and clear.

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**#176 (continued)**

**Implications.** Our video was successfully created based on an intensive collaboration within our local Chinese community. This culturally-tailored video has the potential to motivate Chinese women to adhere to mammography screening. We will be testing the efficacy in future trials with broader community populations.

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**#177****Neighborhood and Stage at Diagnosis of Breast Cancer among Hispanic, African American and White Women in Chicago**

*Richard Warnecke*

The positive relationship between incidence of breast cancer and socioeconomic status and the inverse relation of survival with socioeconomic status are consistent observations. Moreover, studies of the effects of context consistently indicate that contextual or ecological effects are also independently related to survival. However, much of this research has been done using large areas such as states or counties. The impact of place of residence on stage of diagnosis has not previously been explored. We theorize that the social and structural character of where women live influences their stress-level or allostatic load and, through this mechanism, their stage of cancer diagnosis. We explore the relationship between context and stage of diagnosis of breast cancer using data from 343 neighborhood clusters. The dependent variable is proportion of advanced stage cancers averaged over five years across neighborhood clusters; geocoded cases were obtained from the Illinois State Cancer Registry (ISCR). The 343 neighborhood clusters are the unit of analysis and were defined Project of Human Development in Chicago Neighborhoods, PHDCN, (1994-1995). Census data for neighborhood clusters are interpolated from 1990 and 2000 for quality of housing stock, socioeconomic level, racial/ethnic composition, percent of female headed-households, mean education, affluence and other indicators and by access to mammography (estimated by distance to nearest mammography facility), and age (40-68 vs. 69+). Compositional data from the PHDCN include indices of social cohesion, perceptions of personal safety, and community support. Survey data were sampled by neighborhood cluster to allow hierarchical analysis.

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**#178****Until my change comes: Breast cancer survivorship and the transformation of African American women's health advocacy**

*Elizabeth Ann Williams*

Breast cancer represents a major health issue for women of color in the United States. More Euro-American women are annually diagnosed with the disease, yet more African American women with breast cancer succumb. Numerous explanations suggest why breast cancer disparities exist between African American and other American women. Significant among these are: poverty, treatment seeking delays, discrimination in treatment delivery, and differing cultural understandings of cancer.

Some public health and social science literatures regarding African American women and breast cancer present "culture" (whether implicitly or explicitly) as counter-productive to health. However, prevailing ideas about African American women's culturally- determined responses to breast cancer do not match the reality of many African American breast cancer survivors' experiences. Instead of a detriment, "culture" particularly aids many African American survivors' coping abilities. "Culture" also helps other survivors attain a higher quality of life during survivorship by transforming their health advocacy in ways they once perceived as unavailable to them.

Based on a critically informed anthropological approach, including thematic analysis, and seventeen months of ethnographic fieldwork, this paper describes the complex psychosocial and transformative benefits of "culture" for eighteen African American survivors. The findings from this qualitative study indicate the need for more nuanced understandings of the relationship between "culture" and cancer survivorship, notably for women of color.

**#179**

**Treatment seeking behaviors and breast cancer: Past experiences, perceptions and practices among urban African American women**

*Lena Tionne Williams, Sheryl McCurdy, Maria Eugenia Fernandez-Esquire, Robert Chamberlain*

Social attitudes toward cancer, participation in early detection programs, patients' compliance with treatment, and their coping strategies are affected by cultural beliefs and norms. This study represents one aspect of the authors' research on women's experiences with treatment seeking behaviors and breast cancer. African American women's ideas towards breast cancer and treatment were explored via participants' descriptions of past medical experiences and experiences with cancer. Data was collected during 16 in-depth interviews and 4 focus groups in two traditionally low income neighborhoods in Houston, Texas. Three themes emerged: (a) cancer disclosure (b) experiencing medicine and (c) treatment attitudes. Participants found breast cancer to be problematic among African American women and identified the reluctance in the African American communities to discuss breast cancer. Past experiences with cancer and treatment seeking experiences effected how some of the women dealt with their breast cancer diagnosis and future screening behaviors. Trust, fear, and patient reluctance were identified as of the biggest barriers to seeking care at traditional healthcare facilities among these women. If past experiences with cancer weakened the amount of trust that women have in biomedicine, then treatment seeking behaviors area may be affected by these experiences. Participants also emphasized the need for more breast health education and suggested that educators incorporate breast health sooner in low income communities. Although a large volume of breast cancer research now exists, these women's accounts demonstrate that further research into the experience of breast cancer and treatment attitudes are necessary.

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**#180**

**Community-Based Participatory Research Assessment of Underserved Communities in Mobile, Alabama**

*Raymond B Wynn, Roma S Hanks*

**Background:** We will report results of a community-based participatory research (CBPR) assessment of the underserved population in the University of South Alabama-Cancer Research Institute (USA-CRI) service area.

**Rationale:** Lower socio-economic status (SES) of inner city African Americans in Mobile County significantly impacts their cancer-related mortality. While the incidence of cancer for this population appears similar to other races and SES cohorts, mortality rates are disturbingly higher. Lack of access to comprehensive, coordinated care, and delays in patient presentation are contributors to the high cancer death rate.

**Purpose Of Study:** To obtain the following information: 1) Baseline level of knowledge and beliefs in the community about cancer; 2) Race, educational level, income and gender; 3) Cultural, spiritual, and literacy impact on cancer and health care-seeking behaviors; 4) Family and social supports' impact on cancer; 5) Barriers, resources, and inducements to care.

**Methodology:** Using data from focus groups, interviews, and surveys, our collaborative, multidisciplinary CBPR approach seeks to understand the needs and resources of our community regarding cancer control. During the first phase we conducted and analyzed results from a focus group of cancer survivors, service providers, and community leaders to design a telephone survey. The telephone survey polled 800 randomly selected households in the Mobile area. Next steps include a clinic survey and a targeted survey of community subgroups, with preliminary results available for the workshop.

**Results:** Preliminary telephone survey findings include: 22% have no family doctor; 32% have limited or no insurance; 67% report no cancer screenings this year; 32% believe that cancer is spread during surgery.

**Implications:** The USA-CRI CBPR approach will lead to successful cancer control initiatives. Developed by: Raymond B. Wynn, M.D. and Roma S. Hanks, Ph.D.

**#181**

**Breast and Cervical Cancer Knowledge, Attitudes and Belief Measurement among Asian and Pacific Islander Women**

*Barbara WK Yee*

Cultural validity and conceptual equivalence are significant research issues in measurement of breast and cervical cancer (BCC) knowledge, attitudes and belief among Asian American and Pacific Islander (AAPI) populations. This serious measurement and research methods issue extends beyond those of translating the instrument for limited English speaking research participants. The following symposium presentation will conduct a review of the research literature on measurement of breast and cervical knowledge, attitudes and belief cancer among AAPI women, outline issues of cultural validity and conceptual equivalence, and suggest possible research initiatives to advance this field of research.

An analysis of the scant literature on measurement of AAPI BCC reveals: (a) the large majority of studies incorporate universal knowledge or attitudes/belief items about BC and CC risk or symptoms, and (b) few studies use open-ended questions to solicit culturally specific knowledge or attitudes/belief responses about BC and CC risk or symptoms from participants. Specifically, the majority of studies focus upon attitudes toward BC or CC as a disease, screening methods, barriers/motivators to engage in practicing BSE, obtaining screening tests or treatments once the disease is detected, and the role of social and external factors (e.g., social support) for screening, detection, or treatment access. A pilot study was conducted by the author and included face to face interviews with 180 Vietnamese adults between 18 and 87 years of age, 93 males and 87 females. This mixed methods study solicited information regarding BCC disease risk and symptoms and health related lifestyle factors. This presentation will highlight the results of this pilot study to examine universal and culturally specific BC and CC knowledge, attitudes and beliefs, among Vietnamese adults. The presentation will conclude by suggesting possible solutions to enhance cultural validity and conceptual equivalence issues for AAPI populations.

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**#182**

**Effectiveness of a Community-based Prostate Cancer Education Kiosk for African American men: Analyses of Cost, Satisfaction, Quality, Knowledge and Intention variables**

*Steven Lenard Young, Folakemi Titilayo Odedina, Helene Vilme, Cynthia Warrick*

**Background:** The Healthy People 2010 goal for the nation concerning prostate cancer is to reduce prostate cancer death rate to 28.8 deaths per 100,000 males by 2010. The reported death rate for African-American men in 2002 was 62.0 per 100,000 males and for Caucasian men 25.7 per 100,000 males. Based on this statistic, Caucasian men already fare better than the projected goal for 2010 while African American (AA) men have a long way to go to achieve this goal.

**Rationale and Purpose:** Prostate cancer education and awareness is very important to eliminate the disparities experienced by AA men. Thus, the purpose of this study is to evaluate the effectiveness of the prostate cancer education kiosk (PCEK).

**Methods:** Participants were adult AAs who are employees of an HBCU institution. A structured survey instrument assessing participants' demographics and prostate cancer knowledge was employed for the study. Data collection involved three steps: (ii) completion of survey before use of kiosk {pre-test} (ii) use of kiosk by participants {post-test} and (iii) completion of survey after use of kiosk {post-test}.

**Results:** Of the 100 participants, most were men (78%), single (53%), had at least a college degree (52%), and between 40-49 years (58%). Men's score on both the pre-test and post-test knowledge scores were higher than women. PCEK was found to significantly improve participants' knowledge. The post-test knowledge score of participants (89.42%) was higher than the pre-test knowledge score of participants (67.92%).

**Conclusions and Implications:** PCEK offers an effective method to educate AA men about prostate cancer. Future studies should explore the cost-effectiveness of touch screen computers such as PCEK in educating the AA community on diverse health issues.

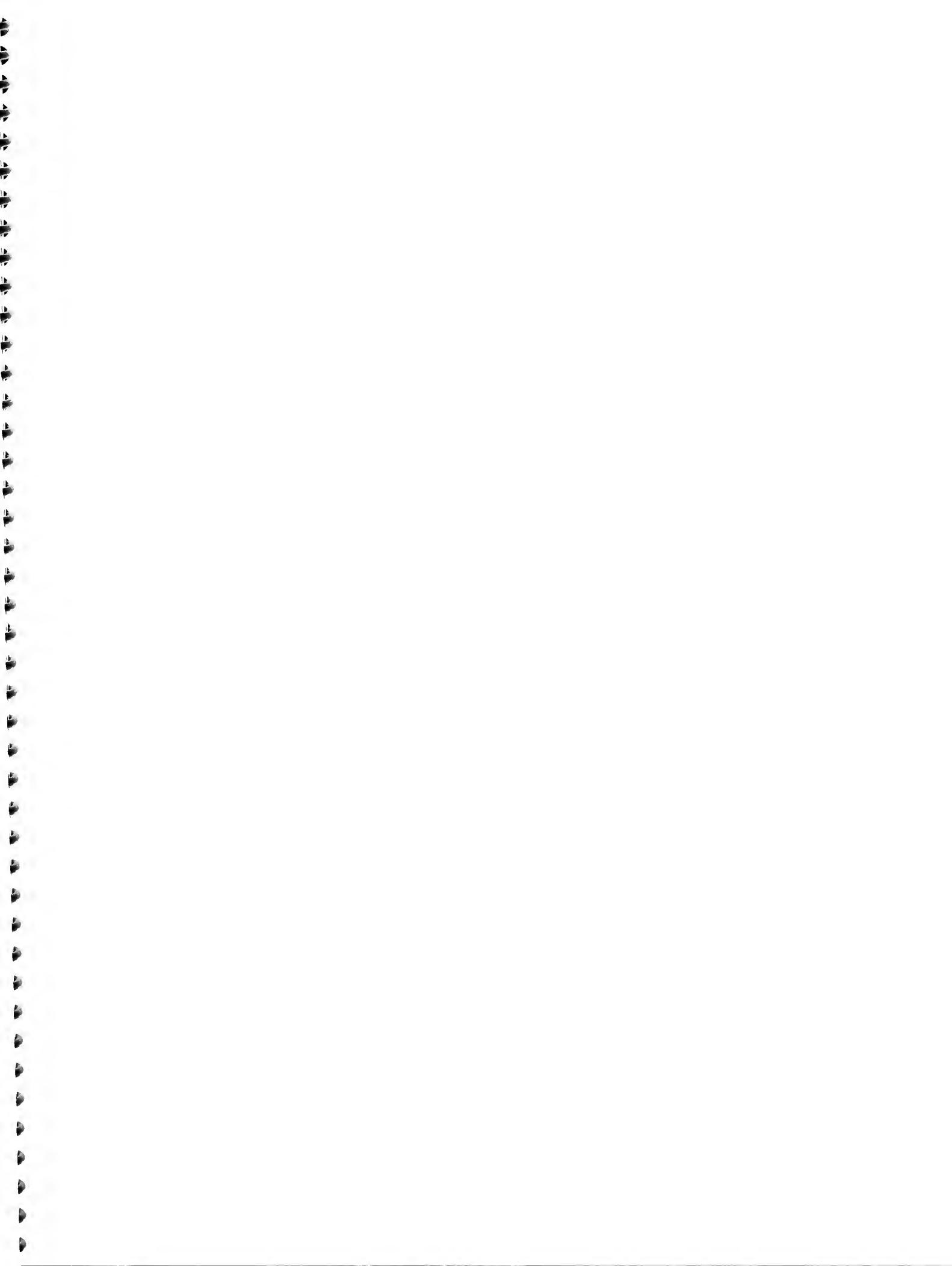


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